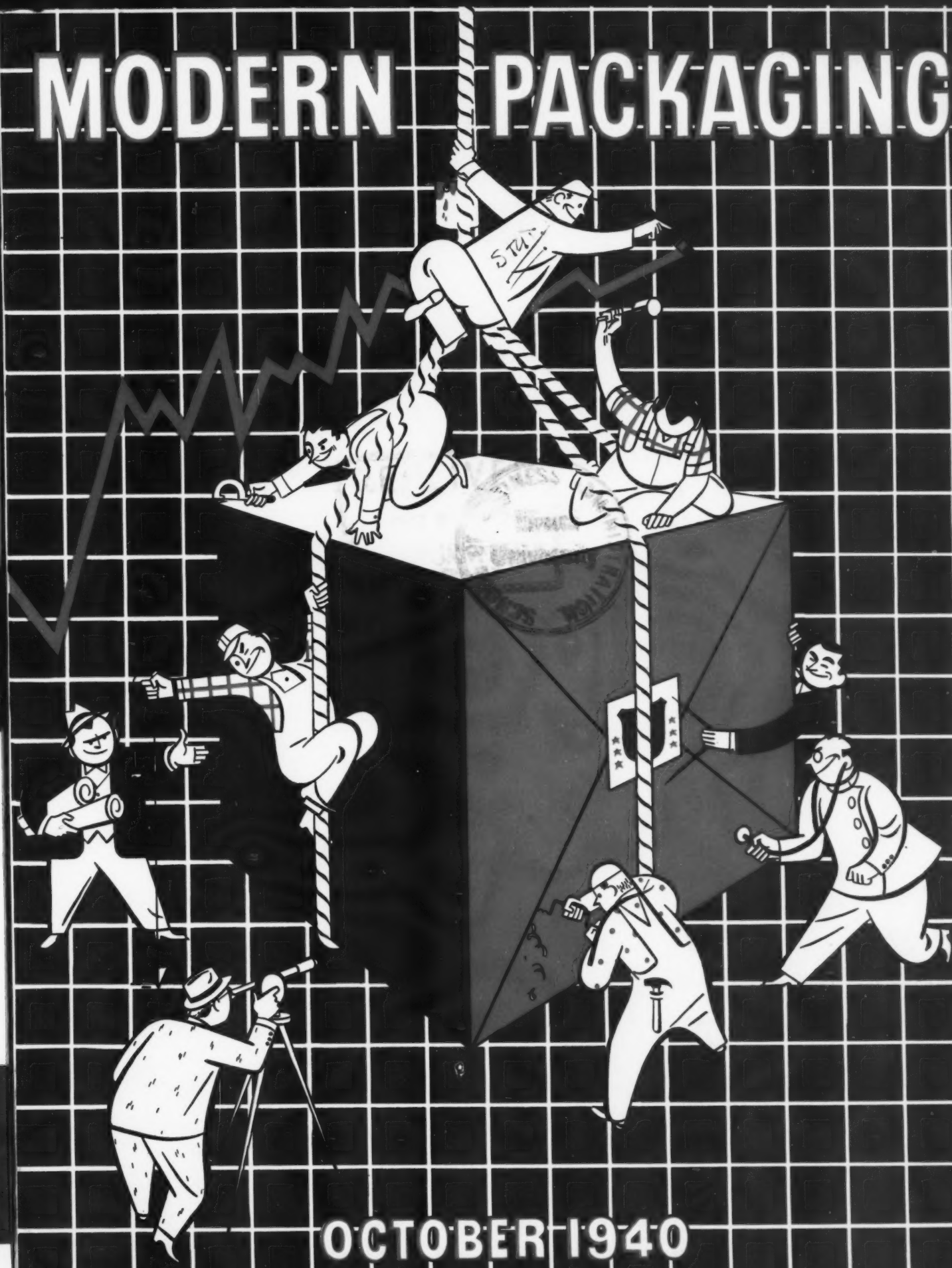
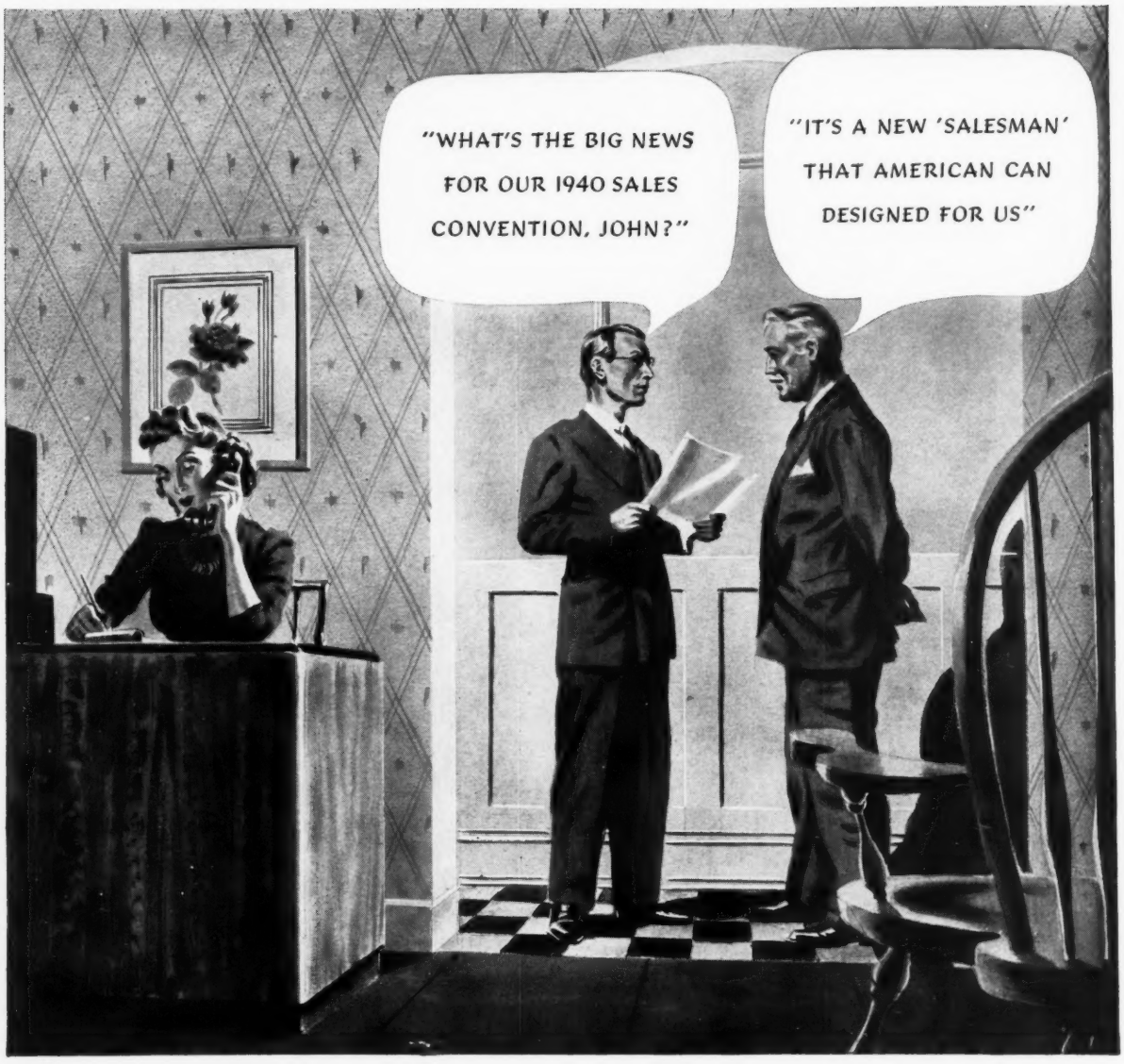
MODERN PACKAGING



OCTOBER 1940



"You see, Bill, I'd felt for a long time that a container which just 'holds' a product is *really holding it back!* So I called American Can in and put our problem up to them. They've developed a container which will be a salesman for us. Its appearance will attract new customers. Its added convenience will make people like to use it. Its ability to keep the quality of our product intact will mean more satisfied users!"

CANCO AMERICAN CAN COMPANY, 230 PARK AVENUE, NEW YORK, N. Y.

Order for NEW Subscription

Please enter my subscription to begin with the _____ issue.

$5.00 for one year ☐ $8.00 for two years ☐

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Your position (or profession) _____

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CANADA—$5.00—One Year
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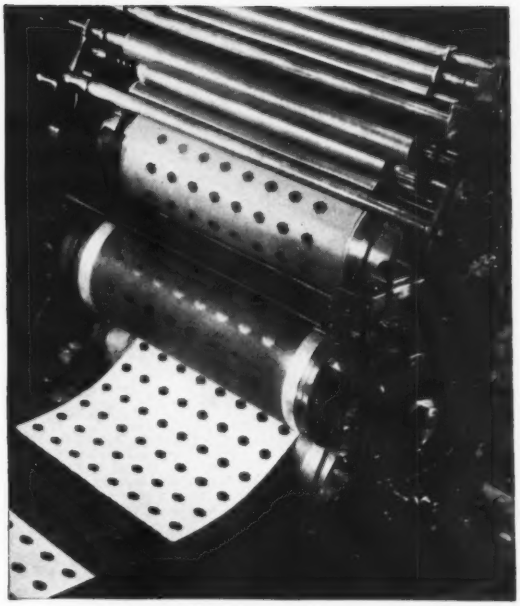
First Class Permit No. 2656 (Sec. 510, P. L. & R.), New York, N. Y.

MODERN PACKAGING

122 East 42nd Street

NEW YORK, N. Y.



PRODUCTS to the right of them. Products to the left of them. Products in front of them. Consumers who wend their way through food shops and drug stores have little difficulty in finding the articles they want to buy. The question is: Which brand to choose? And little wonder! Here's a counter laden with competitive packaged products — there's a shelf where others are aligned in long rows . . . like opposing armies. A pyramid of product "A" crosses swords, commercially, with a similar stack of product "B". Spotted around are display stands offering their wares in silent but grim competition. Here is the golden opportunity. Here catchy, unusual packages grasp the wavering attention of shoppers. And hold it. For it takes case-hardened sales resistance to overcome the impulse to reach for the most attractive package in a group. And a package in the hand is a step in the right direction . . . towards the cash register. Attractive packaging does help sell goods. Manufacturers of glass packaged products (to confine ourselves to our own sphere) have few doubts on that score. Their problem is to provide their products with packages which stand out like the Koh-i-noor in a collection of bargain basement jewelry . . . packages which have greater lure-power for the eye and hand. Well-designed, colorful lithographed metal caps can be, and are, important parts of such packages. And producing lithographed metal caps for fine glass packages has been a specialty of ours for a long, long time. We are pioneers in metal decorating. The ovens used to dry decorated tinplate in our plants, and in many other metal decorating plants throughout the world, were conceived and developed by us. Lithographing, to us, is of such importance that we have placed this division of our business entirely under one roof — our own. Here preliminary sketches suggesting new lithographed designs or improvements in old ones, finished drawings and transfer plates are prepared. Tinplate is decorated, dried and fabricated into finished caps. All this is accomplished by artists and craftsmen experienced in metal cap and packaging requirements. Which means that in lithographing the Phoenix Metal Caps which are used on so many magnetic packages, everything is under control . . . expert, experienced control.

PHOENIX METAL CAP CO.

CHICAGO, ILL. • BROOKLYN, N. Y.

Branch Offices: Philadelphia, Baltimore, Boston, Cleveland, Cincinnati, St. Louis, San Francisco and Los Angeles.

Modern Packaging

CHARLES A. BRESKIN, *Publisher*

ALBERT Q. MAISEL, *Editor*

OCTOBER 1940

VOLUME 14 NUMBER 2

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ANNOUNCEMENT BY THOMAS HEDLEY & CO. LTD.
HERE'S HOW YOU CAN DO YOUR BIT FOR BRITAIN!
Save your Hedley cardboard cases—
for these three vital reasons:
WARNING!
COUPON

NOVEMBER

Next month Modern Packaging will present to its readers a dual survey. One part will study the effect which the war has had upon packaging, package design and the availability of package supplies in Europe and particularly in Great Britain. The second part will analyze the probable effects of rearmament and war (if it should ever come) upon the domestic packaging scene. So much rumor and scare-mongering has pervaded certain circles that it is hoped that this authoritative survey may aid packagers to prepare for all probable contingencies while allaying all unfounded fears.

Above: One evidence of the effect of war on British packaging, reproduced through the courtesy of "Shelf Appeal."

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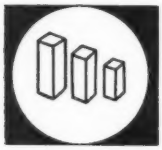
★★ PACKAGING...and THE AMERICAN WAY ★★

INSURES ACCURACY -guarantees the correct solution-imprint on each carton of ARGYROL

SLITLOCK

The bottle of Argyrol cannot drop through the bottom of the carton, thanks to the slit in the tuck flap which locks it in place.



ADJUSTABLE

Three sizes, the ¼ oz., the ½ oz. and 1 oz. bottles, are cartoned on the one Redington machine . . . the change-over can be made within ten to twenty minutes.

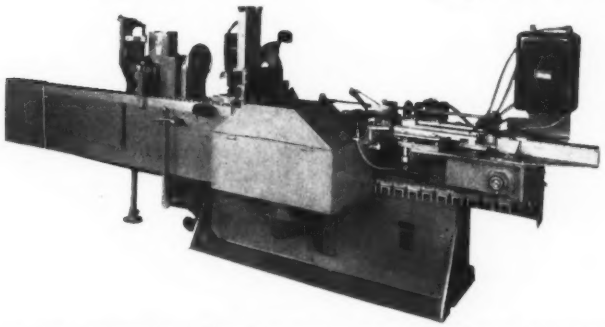
CIRCULAR

Argyrol's circular handled on The Redington is unique . . . in one corner a small rectangular section is perforated and gummed. This sticker is dated by the druggist and attached to the bottle.

Again modern packaging does its part in advancing "The American Way of Living" . . . this time in providing a *safeguard* in the pharmaceutical field.

Argyrol is prescribed in solutions of 5%, 10%, 15%, 20% and 25%. It is extremely *important* that the carton be marked with the proper strength. For example, a bottle of 25% solution might be placed accidentally in a carton marked 5%.

A. C. Barnes Company, makers of Argyrol, wanted positive assurance against such errors that might originate in the printer's packing room. So Redington developed the idea of locating a hole in different positions on the bottom tuck flap cartons for each strength. The photoelectric cell mechanism is set for the proper solution being packaged. If an incorrect carton should go through, it is immediately *detected* and the machine is stopped. This unique mechanism is the consumer's *guarantee* that he is getting what the doctor ordered.

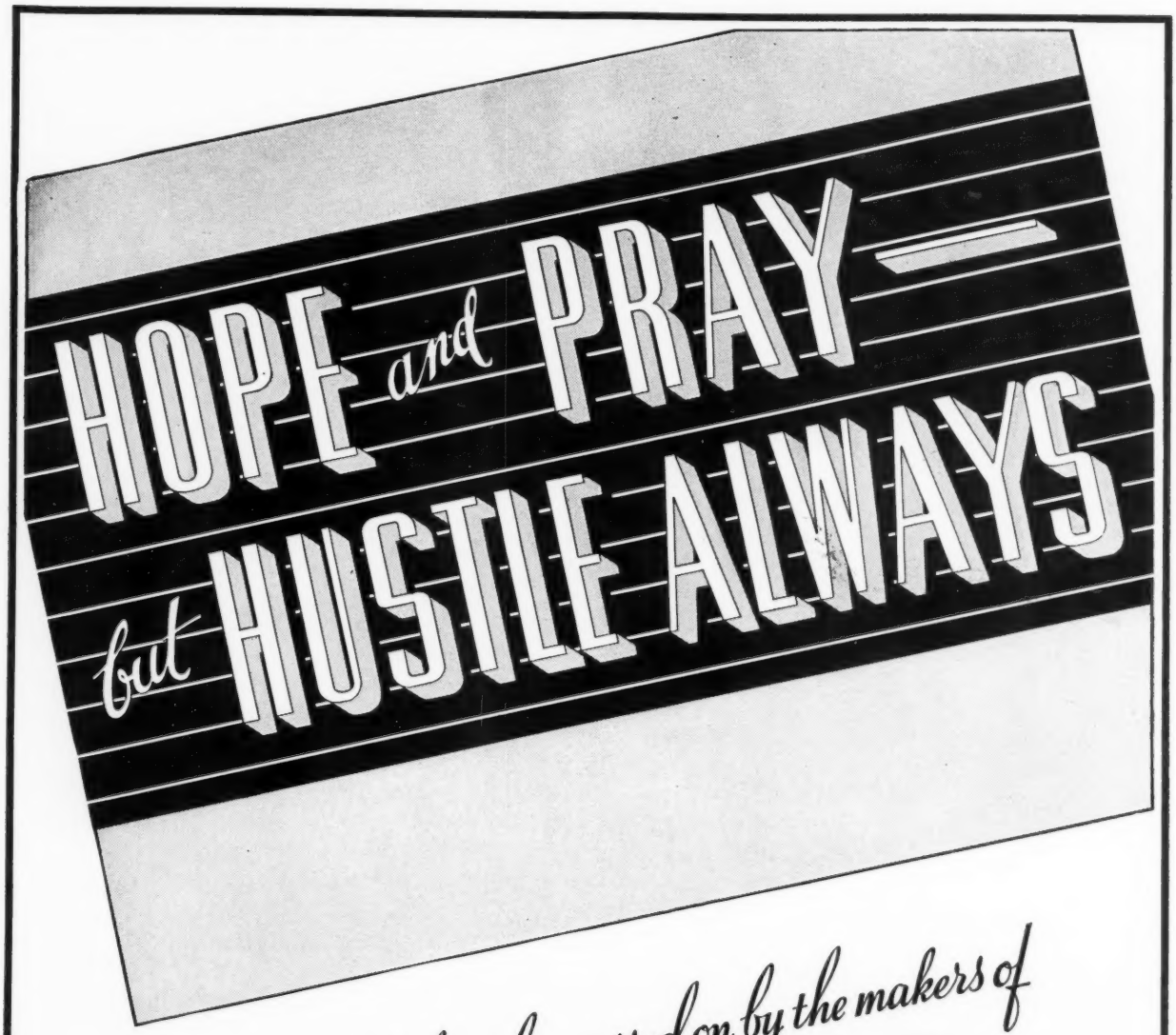


Redington provided the high speed *adjustable* cartoning machine that makes Argyrol's "safety" carton economical to produce. Today hundreds of firms are advancing *"The American Way of Living"* with products packaged on Redingtons. Perhaps yours should be included.

F. B. REDINGTON CO. (Est. 1897) 110-112 So. Sangamon St., Chicago, Ill.

REDINGTON PACKAGING MACHINES ★

for CARTONING • WRAPPING • SPECIAL PACKAGING

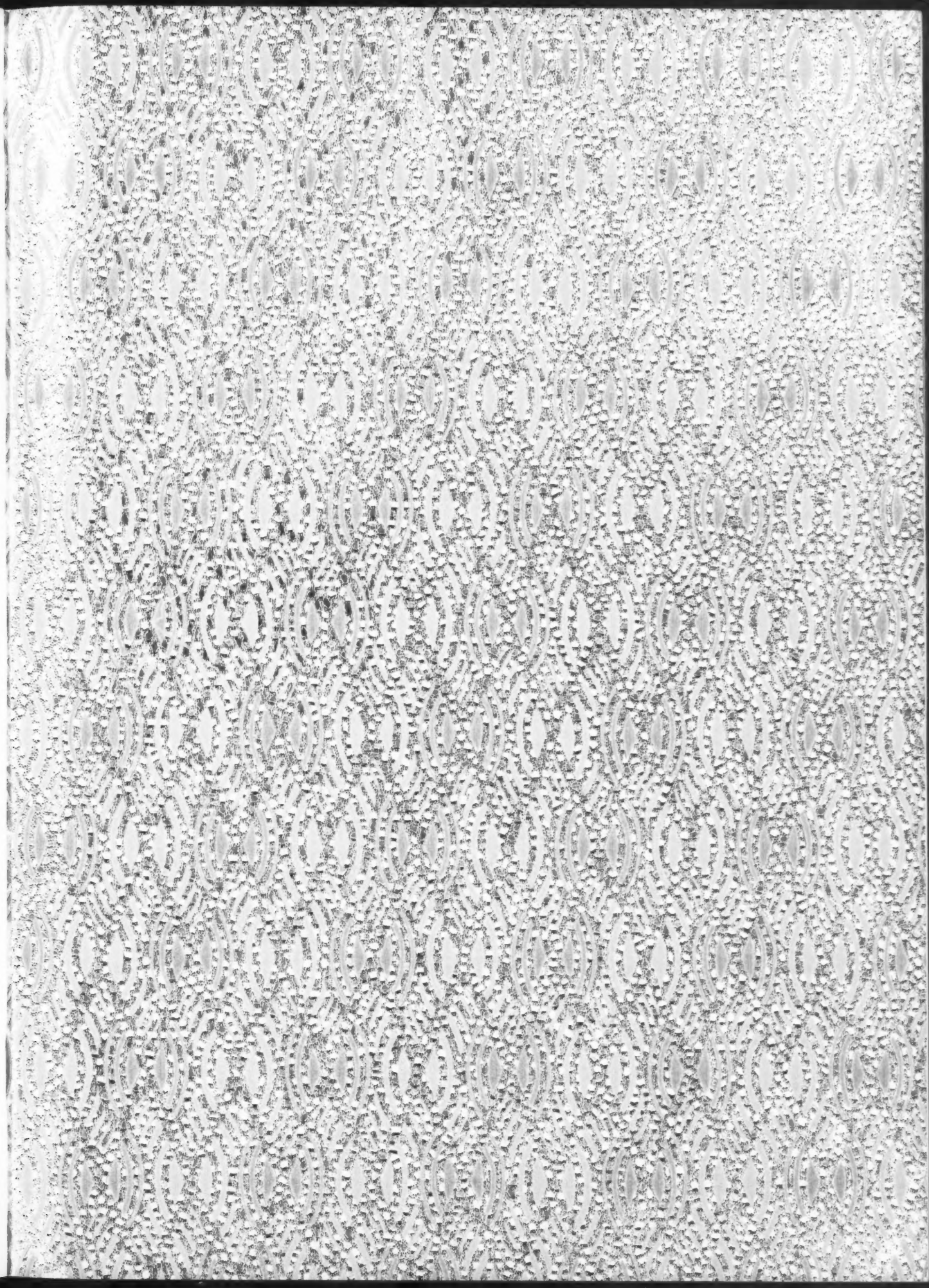


Another good thought passed on by the makers of

KVP

★ FOOD PROTECTION PAPERS

KALAMAZOO VEGETABLE PARCHMENT COMPANY
PARCHMENT, KALAMAZOO, MICHIGAN



PEARL-LACE FOIL

640 - Emb. 281

With all the beauty of a pearl, this new box paper, created at the Hampden Mills at Holyoke, is ready to decorate your box in many scintillating pastel colors.

Sample work sheets are available in a number of attractive color tones. Why not send for them to-day.

Hampden

GLAZED PAPER AND CARD COMPANY

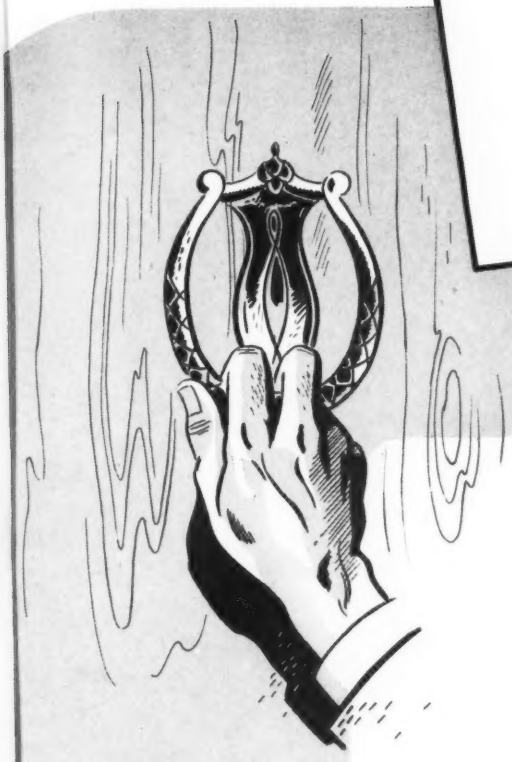
Holyoke, Massachusetts

SALES REPRESENTATIVES

Chicago, Ill. — 500 So. Peoria St.
Philadelphia, Pa. — 412 Bourse B'ld'g.
New York, N. Y. — 60 East 42nd St.
San Francisco, Calif. — 420 Market St.
Toronto, Canada — 137 Wellington St. West
Fred'k. Johnson & Co., Limited — 234, Upper Thames Street — London, E. C. 4, England
Seattle, Wash. — 1203 Western Ave
Dallas, Texas — 3905 Amherst Ave.

"Not many sounds in life . . . exceed in interest a knock at the door."

CHARLES LAMB



You can give consumers opportunity after opportunity to look at your package, to touch your package — but will they purchase your product?

Your package must provide the incentive to "open" as well as to "look." It must have buy appeal as well as eye appeal. It must be modern, in tune with the design and purchase trends of today's markets.

A Carr-Lowrey analysis of your package problem costs nothing, may have untold value to future sales. Carr-Lowrey's more than 50 years of successful package creating, to meet sales needs, is your guarantee of getting a new or re-designed package that will fill *your* bill.

Carr-Lowrey's experienced designers will give your glass containers full attention on three points: (1) Attractiveness, (2) Practicability and (3) Economy. This "three point" service is building new sales for hundreds of leading packagers of cosmetics, drugs, household specialties and foods.

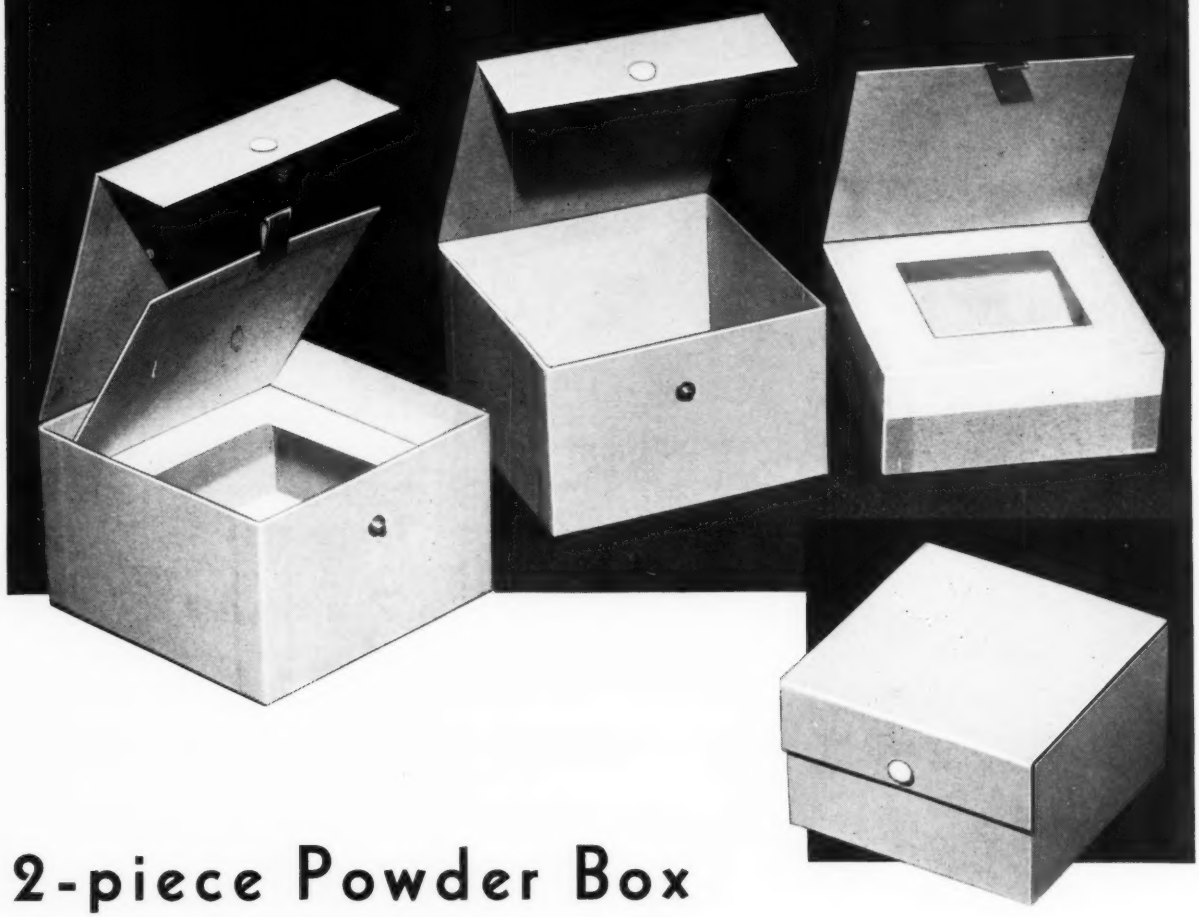
Simplicity and grace characterize this effective cyrstal-clear glass container for a sophisticated eau de cologne. One of the results of Carr-Lowrey's "three-point service."

Carr-Lowrey Glass Co.

Factory and Main Office: BALTIMORE, MD.

New York Office: 500 Fifth Avenue • Chicago Office: 1502 Merchandise Mart

NOVELTY ASSEMBLIES



2-piece Powder Box

Picture this unit in your design and colors—or let us suggest a packaging assembly of equal proficiency for your product, not necessarily toiletries.

This unit, for example, consists of two set-up boxes. The leak-proof inner box has a transparent face safely protected by a hinged cover. The outer box provides ample space for the powder puff, and the strong hinged cover is held fast by a snap fastener for handling, packing and shipping.

It is a practical, reasonable unit for high quality powders, one of many interesting assemblies by WARNER-CRAFT.

WARNERCRAFT
THE FINEST WORD IN PACKAGING

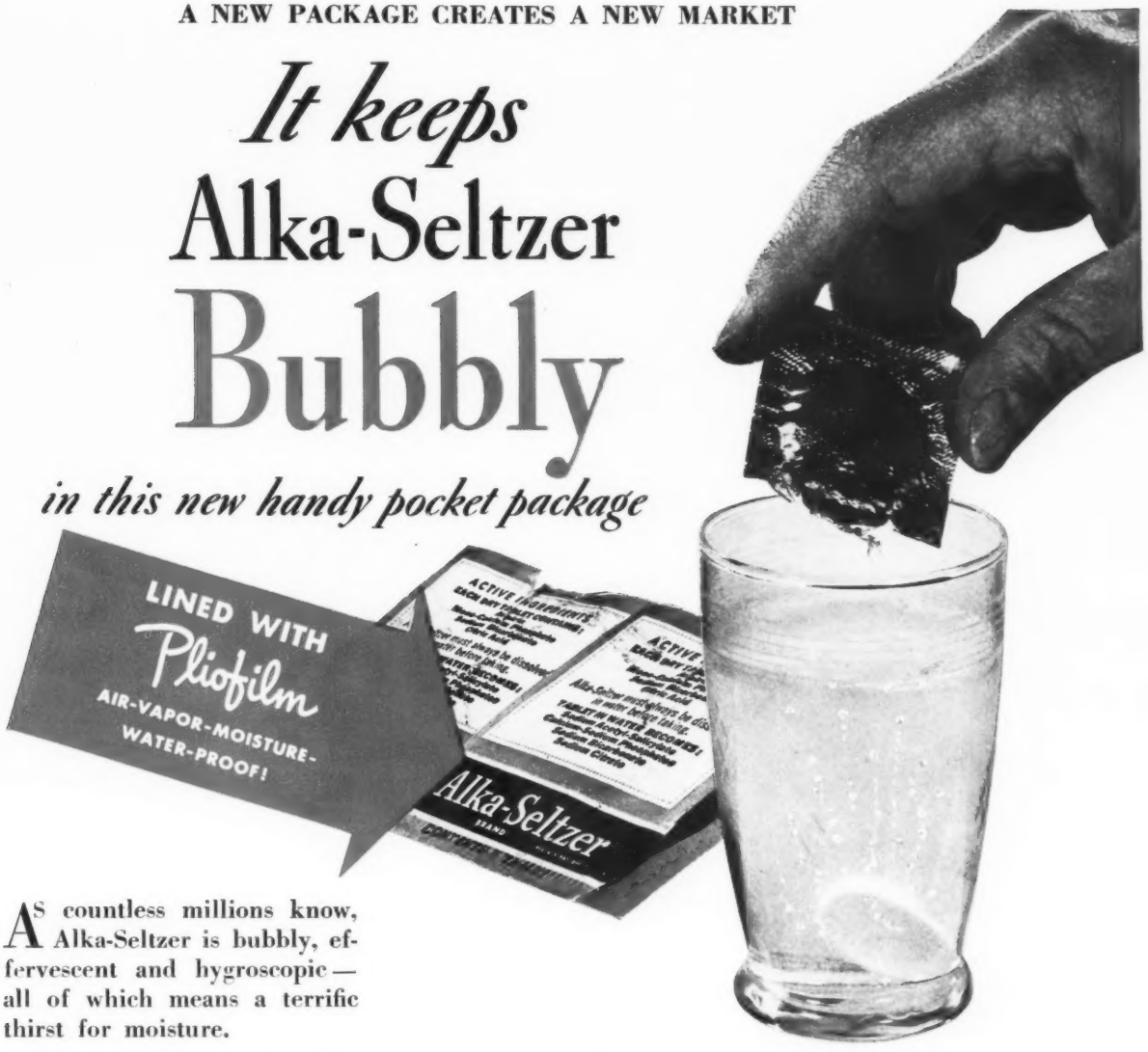
In the All-America Package Competition for 1939, Warnercraft boxes figured in four top awards—two in the Family Group; one in the Set-Up Paper Box Group; and one in the Miscellaneous Group.

THE WARNER BROTHERS COMPANY
BOX DIVISION—BRIDGEPORT, CONNECTICUT
200 Madison Avenue, New York, N. Y. AShland 4-1195

A NEW PACKAGE CREATES A NEW MARKET

It keeps Alka-Seltzer Bubbly

in this new handy pocket package



As countless millions know, Alka-Seltzer is bubbly, effervescent and hygroscopic — all of which means a terrific thirst for moisture.

That's why this handy new Alka-Seltzer individual-tablet pocket package is made of *Pliofilm*-lined Alcoa Aluminum Foil — because *Pliofilm* is so completely moisture-water-proof, *it is impervious even to damp vapors!*

And *Pliofilm* heat-seals airtight. This new package withstands a vacuum pull of 25 inches.

As a result Alka-Seltzer in this new package stays dry, fresh and potent, *until used* — as you can easily prove at the thousands of new points of sale this package is now creating. If you have a similar problem in keeping your product free from moisture, or protecting it from moisture-evaporation, let us show you how you can do it better and more economically with *Pliofilm*. Write: Pliofilm Sales Department, Goodyear, Akron, Ohio.

HOW IT'S MADE

This new individual-tablet Alka-Seltzer package is produced by feeding two continuous strips of *Pliofilm*-lined Alcoa Aluminum Foil into a high-speed machine that automatically inserts the tablets between the strips, heat-seals them in separate envelopes, then cuts the packets apart and affixes the labels. This package was developed for Miles Laboratory, Inc., makers of Alka-Seltzer, through the collaboration of Goodyear, producers of *Pliofilm;* the Aluminum Company of America, manufacturers of Alcoa Aluminum Foil; the Dobeckmun Company, converters; and Ivers-Lee Company, designers of the packaging machine.

THE GREATEST NAME IN RUBBER
GOODYEAR

PLIOFILM—T.M. The Goodyear Tire & Rubber Company
Alcoa Aluminum Foil—registered trade-mark of the Aluminum Company of America

Pliofilm

Proof OF THE PUDDING *is in the eating*

"and proof of a GOOD Gift Package is in its sales record"

The above Smithcrafted two-piece wood, leather-like wrapped, and padded chest has been used THREE consecutive years, with a sales increase of better than 200% to its credit.

Many other national accounts, in widely different fields, have successfully employed Smithcrafted especially-designed-for-them gift containers not only for three, but in some instances four and five consecutive years.

The Answer?—They have what it takes! They are designed first and foremost around and for the particular product being packaged, to fit that product as to character and best merchandisable price; they lend definite "quality" impression to the product and the gift package as a whole; and they enhance the value impression of the package by very obvious "after-use"—"after-use" without loss of dignity or prestige of the product housed within the container.

The S. K. SMITH COMPANY

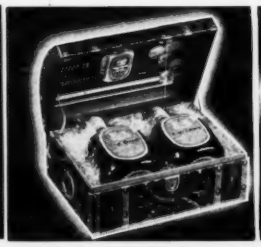
2857 N. WESTERN AVENUE **CHICAGO, ILL.**

New York Address—52 Vanderbilt Avenue—Murray Hill 9-8290

A large fibre board chest.

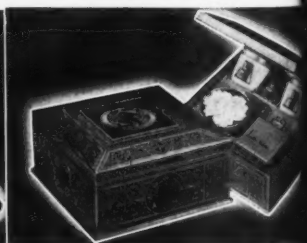
A round metal fruit cake container with carved ivory effect applied around sides and lid.

A real antique treasure chest of fibre board.



A lovely oval Wedgewood reproduction.

A large two piece wood chest with exquisitely embossed metal covering like chased silver.



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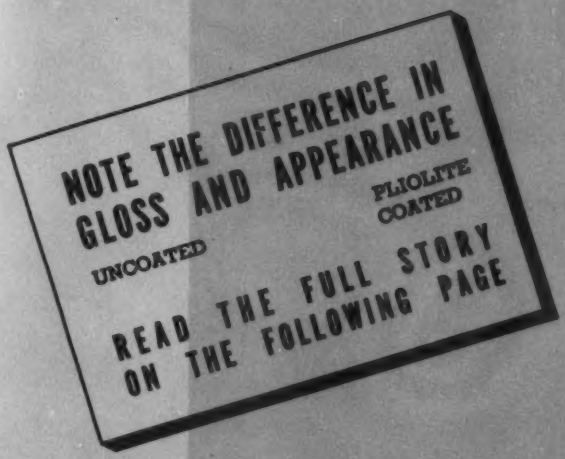


GOODYEAR

PLIOLITE

PAPER COATINGS

SPECIFY

GOODYEAR

PLIOLITE

Pliolite-coated glassine container shows little moisture loss in 7 days—uncoated container approximately 75% loss.

HERE'S THE PROOF

Pliolite-coated labels make fibre-bodied cans moisture-proof!

PAPER AND LABEL COATINGS

—to obtain maximum resistance to moisture absorption or moisture loss

—to improve gloss and appearance of your package or label

—to use all fibre containers or fibre-bodied cans in place of metal

Careful scientific tests prove that there is 99% less moisture-vapor transfer through Pliolite* coated labels and papers than through the same stocks uncoated.

Pliolite coatings can also be used on glassine papers and in paraffin coatings. In these applications it not only imparts high moisture-vapor resistance, but also increases strength and heat-sealability. Combinations of paraffin and Pliolite are available, ready for use, under the name of Pliowax. Such Pliowaxes are now being widely used for hot melt coatings.

If you have a difficult packaging problem involving either moisture absorption or evaporation, let us demonstrate the superiority of Pliolite coatings with a test wrap of your product. Just write to Pliolite Sales Department, Goodyear, Akron, Ohio.

*Trade-mark of The Goodyear Tire & Rubber Company

GOODYEAR

HOLD *Lithwite* UP TO THE LIGHT ...AND LOOK!

You'll see cleaner, crisper printing results on that smooth, level, fuzz-free surface!

Send for sample sheets of this economical, quality-made boxboard..test them on a press.

GET acquainted with the boxboard that means snappier carton and display jobs, fewer press room headaches, longer runs with less ink. That's Lithwite, the modestly-priced board with a surface that's made to fine paper standards.

Lithwite's brilliantly white surface makes a perfect background for colors . . . and it's so smooth and hard that it takes flat tints or fine screen halftones clean as a whistle. Without picking . . . and with less ink absorption!

Seeing is believing! Write for Lithwite test sheets. We'll send them without obligation. Slip them into the press at the end of a run . . . compare the results with the board you are now using. Notice the cleaner, brighter difference. Write for those test sheets today!

NO HILLS OR VALLEYS!

Lithwite's surface is always level because scientific checks and tests control the production of this better boxboard every step of the way. It's precision-engineered!

***HAVE YOU A BOARD PROBLEM?** Tell us about it. If we do not have just the board you need, our technical staff will gladly work out one to meet your specifications.*

THE GARDNER-RICHARDSON CO.

MANUFACTURERS OF BOXBOARD • MIDDLETOWN, OHIO

Sales Representatives in Principal Cities: Philadelphia • Cleveland • Chicago • St. Louis • New York • Boston • Pittsburgh • Detroit

Dog Food
HUNTER
Dog Food
7 FOR
ANCHOR

Merchandising

is simple as

A-B-SEE—

Pack YOURS in Practical, Inexpensive Glass and WATCH Your Sales and Profits MOUNT!

● Nothing complicated about dog food merchandising—even though there are some 150 brands on the market today. Just pack *yours* in GLASS—and let people *see* what you have to sell! That will do a better and more convincing job of increasing sales than any number of words printed on the label!

For people have strange ideas about dog foods. This is such a *new* business that it's surrounded with rumors—most of them false. Once a dog owner can *see* that the food you have to offer is edible-looking, clean and appetizing, she'll buy with confidence.

Grocers will display dog foods packed in glass, because it's a novel idea. Veterinarians like it, too, because the package is clean and sanitary and won't rust in storage. Customers prefer it because it's easy to get into, lets them see how much they take out for each feeding. Yet a handsome *glass* package costs no more than other, less desirable types of containers.

Get the facts! Let us show you what an Anchor Hocking Glass Container can do for your product. Send us several samples of your dog food as now packed. We'll repack it in glass and give you visual proof of our story. Then you judge for yourself. No obligation of course.

ANCHOR HOCKING GLASS CORPORATION
Lancaster, Ohio
Closure Subsidiary: ANCHOR CAP & CLOSURE CORPORATION
Lancaster, Ohio and Toronto, Canada

HOCKING — GLASS CAPS

-an unbeatable combination

LUMARITH PROTECTOID

REG. U.S. PAT. OFF

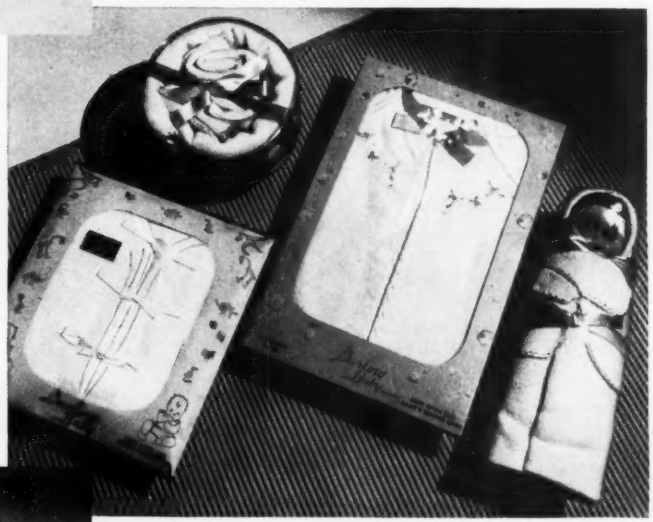
puts the sparkle into the year's high in merchandising genius

Above—*Rigid Containers for Wearite by Wallace Paper Box Company, N. Y. C.*

WEARITE SPECIALTY COMPANY, makers of the "Darling Baby" line of infant necessities had an ingrown conviction that it was time someone took such items out of the "bulk goods" group and made them as irresistible as the tiny tykes for whom they were intended. They knew that the answer was packaging . . . transparent packaging. But there, the idea threatened to bog down . . . and did, until Wearite became acquainted with Lumarith Protectoid.

The very softness of "Darling Baby" items demanded a transparent packaging material that could stand on its own . . . that wouldn't shrink or stretch or be otherwise warped by humidity or temperature changes . . . characteristics that are offered by Lumarith Protectoid. This outstanding merchandiser uses all types of packages—wraps, window envelopes, window boxes, rigid transparent containers—and in all of them Lumarith Protectoid solves his problem.

Below—*Window Envelopes for Wearite by Samuel Cupples Envelope Co., Brooklyn, N. Y.*



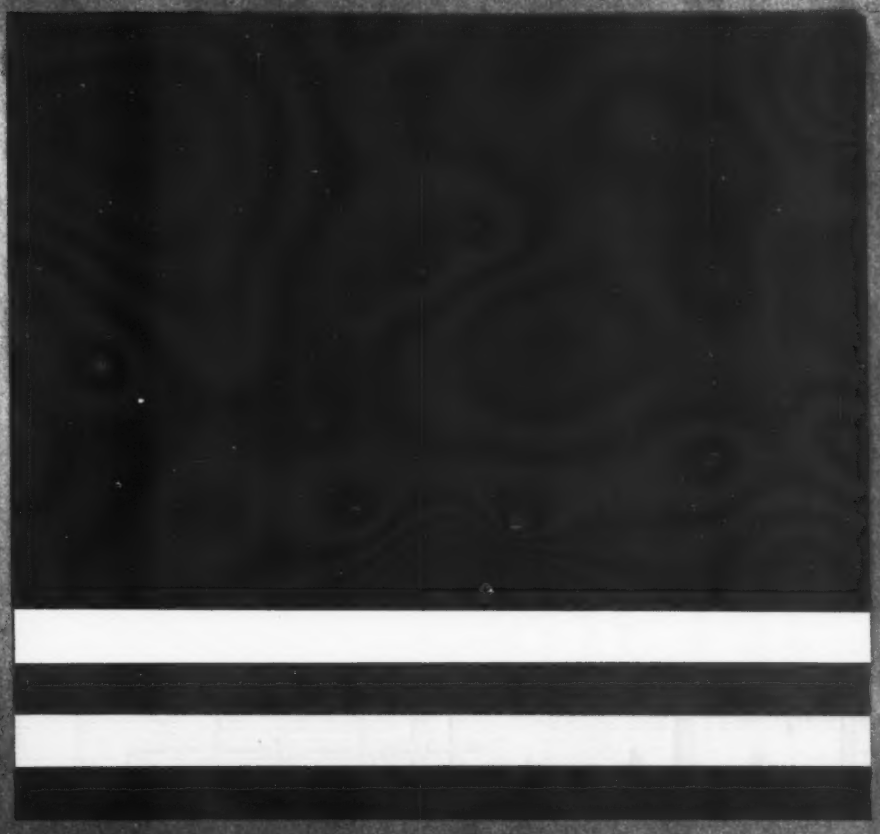
Left—*Window Boxes for Wearite by Robertson Paper Box Co., Montville, Conn.*

Investigate the opportunities afforded by Lumarith Protectoid. *Packaging Division*, Celluloid Corporation, 180 Madison Avenue, New York City. Established 1872. Sole Producer of Celluloid and Lumarith. (Trademarks Reg. U.S. Pat. Off.)

If you are working on a transparent or plastic package . . .

Get in touch with CELLULOID also Headquarters for PLASTICS

DRESS UP... IN SHANTUNG



CREATORS · CHEMISTS · CRAFTSMEN

NASHUA

MAKES PAPER MAKE MONEY FOR YOU

Here is a new Nashua paper -- embossed with a design suggestive of Shantung fabric -- that offers new opportunities for originality in PACKAGE APPEAL.

It's one more in a long list of achievements by Nashua creators, chemists, craftsmen -- involving VISUALIZATION of a sales-making design . . . careful ANALYSIS of paper and coating . . . skillful USE of an intricate embossing roll.

The swatches show only a few of the great range of colors obtainable. Would you like more samples?

NASHUA GUMMED AND COATED PAPER COMPANY -- NASHUA, N. H.

Look for the Triangle NASHUA Sign of a Nashua Value

DEEP into PAY DIRT!

CONTAINER-WISE . . . *"NATIONAL" tirelessly digs deep into the "pay dirt" of Package style . . . skillfully turning up* practical *essentials and brilliant display features that quicken SALES from shelf and counter.* ★ *"NATIONAL" Container Service is deep-rooted in the rich soil of Experience. It presents a constantly fresh viewpoint on Sales-by-the Package, and expert craftsmanship in can-making and lithographed decoration adds every refinement of Container production and finish.*

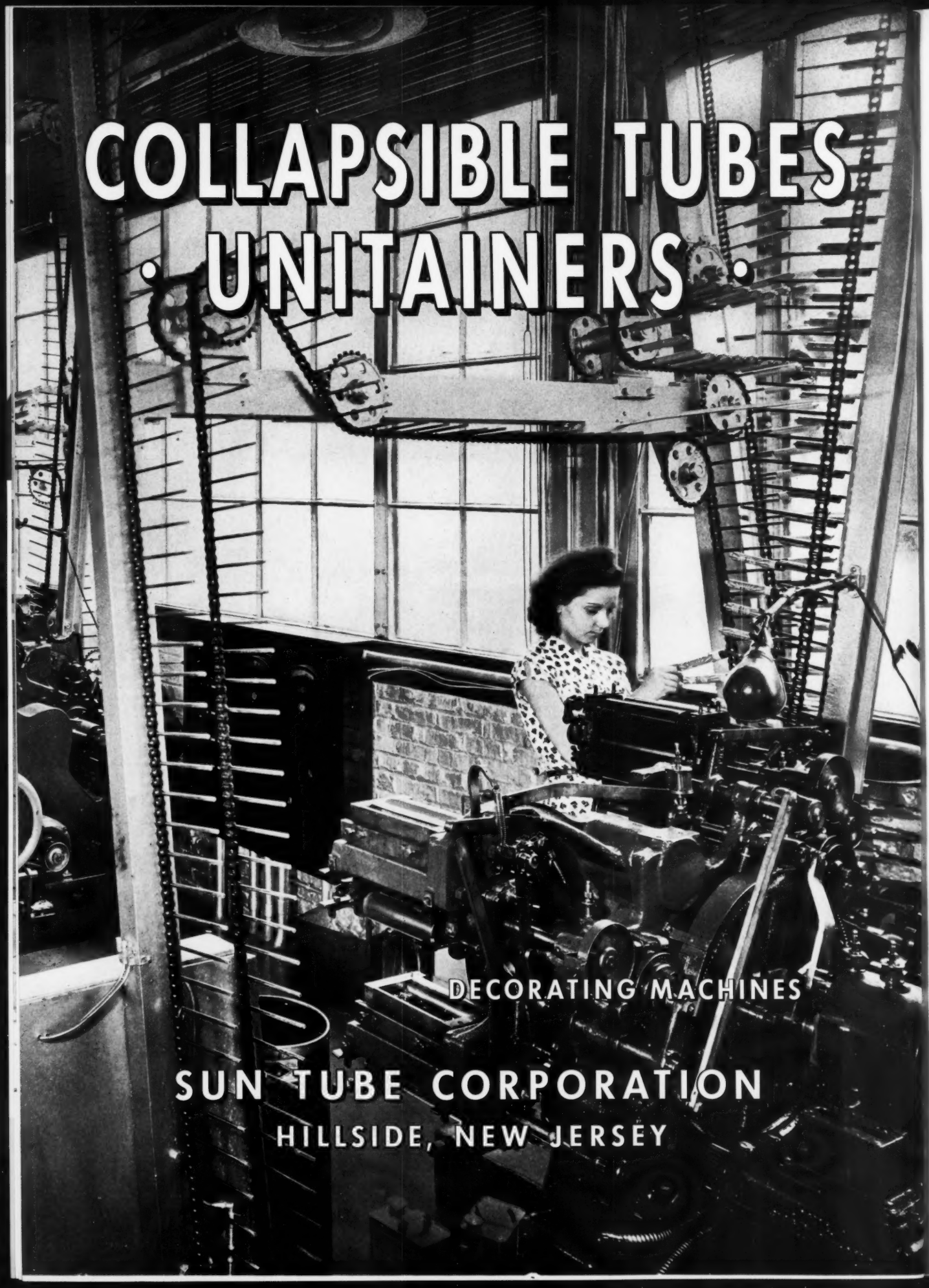
"NATIONAL" TAKES OVER YOUR PACKAGING SPADE-WORK!

NATIONAL CAN CORPORATION

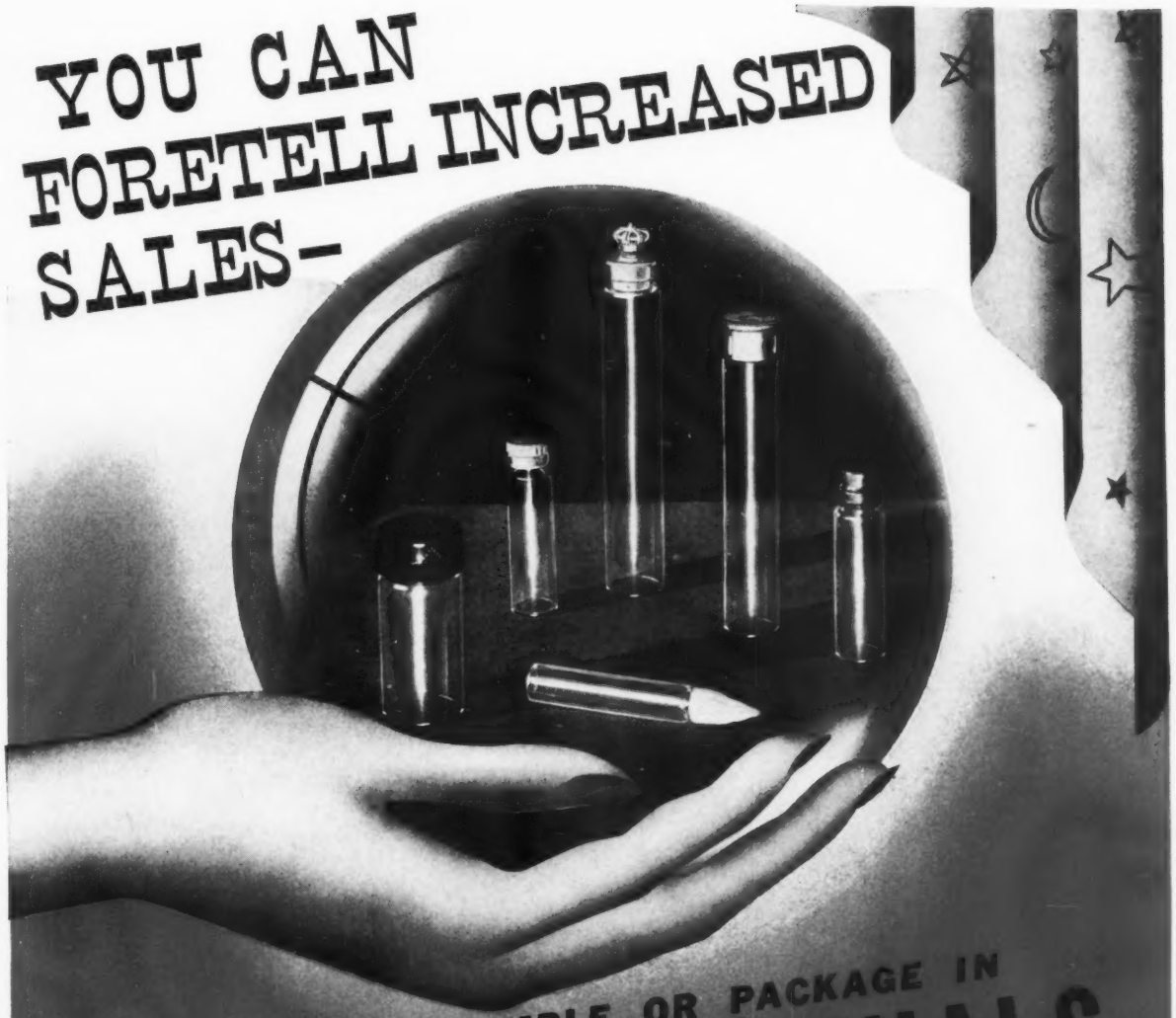
SUBSIDIARY OF McKEESPORT TIN PLATE CORPORATION

EXECUTIVE OFFICES • 110 EAST 42nd STREET • NEW YORK CITY

Sales Offices and Plants • NEW YORK CITY • BALTIMORE • MASPETH, N. Y. • CHICAGO • BOSTON • DETROIT • HAMILTON, OHIO


COLLAPSIBLE TUBES
· UNITAINERS ·
DECORATING MACHINES
SUN TUBE CORPORATION
HILLSIDE, NEW JERSEY

YOU CAN FORETELL INCREASED SALES—



WHEN YOU SAMPLE OR PACKAGE IN

KIMBLE GLASS VIALS

- ✔ LIGHT IN WEIGHT
- ✔ FULLY ANNEALED
- ✔ PERMANENT TRANSPARENCY
- ✔ CONVENIENT TO CARRY

For A NEW VERSION OF YOUR *OLD* PACKAGE
A RAPID ACCEPTANCE OF YOUR *NEW* PRODUCT
Consult Kimble

K KIMBLE GLASS

• • • *The Visible Guarantee of Invisible Quality* • • •

KIMBLE GLASS COMPANY • • • • VINELAND, N. J.

NEW YORK • • CHICAGO • • PHILADELPHIA • • DETROIT • • BOSTON

© 1940, KIMBLE GLASS CO.

RIEGEL PAPERS AT WORK

Can a pretty package sell merchandise? Some things — sometimes — but the tremendous sales volume behind the products you see in the average grocery store is built on one thing — repeat sales. This repeat volume can't be won with a clever trick. It must be gotten the hard way — by thorough and painstaking attention to every possible angle in production, distribution, advertising and sales. This requires an attractive package, of course, but it also necessitates a package that will help repeat sales by preventing any possible product deterioration — loss of flavor, mold, sogginess, rancidity, leakage, infestation, freezer burn, etc. This is the part of the packaging picture where so many Riegel Papers are quietly and effectively doing their part for the volume sales leaders of the food field. Walk into any grocery store and you can find them at work — without fanfare or ballyhoo — in cartons, bags, wrappers — even in tins and bottles — helping to sell the nation's food supply. Perhaps they can also be of assistance in your sales problem. Ask us today.

RIEGEL PAPER CORPORATION, 342 MADISON AVE., NEW YORK, N. Y.

Don't be fooled by a funny hat!

(Women Are Plenty Practical About Packages!)

LAUGH at their hats if you wish . . . but when women talk about packages, listen seriously.

"I don't like that kind. It wouldn't fit in my bathroom cabinet."

"That's what I want. It won't slip out of my hand."

Such practical criticisms forecast a product's future. Packaging counselor to American industry, Owens-Illinois listens when women speak.

We do more—we ask. We preview packages to women to get their judgment. A continuing survey on containers for varied products brings us frank opinions from women in every part of the country.

That's one way we blueprint the ideal container for a product. And whether the facts call for metal or glass, we can produce it, for we make both.

Ours is a complete service—not only containers but molded or metal closures and corrugated shipping cartons. For your benefit, we maintain the largest Packaging Research Laboratory of its kind.

Our dossiers on women's likes and dislikes may reveal something important you'd like to know about *your* packages. Let's get together and find out.

OWENS-ILLINOIS

Packaging Service

GLASS CONTAINERS • METAL CONTAINERS • CLOSURES • SHIPPING CARTONS

Owens-Illinois Glass Company, Toledo • Owens-Illinois Can Company, Toledo
Libbey Glass Company, Toledo • Owens-Illinois Pacific Coast Company, San Francisco

A Stand Out..
..IN PERFORMANCE

• • • **Shooting through the air** at four miles a minute the new stratoliner demonstrates standout performance in coast-to-coast air travel. Daily, in hundreds of instances, Sefton Fibre Cans also demonstrate standout performance in package protection . . . in moisture and vapor resistance . . . in point of sale attractiveness . . . in countless ways that help put your product in the standout class. Our packaging service will gladly help you with your problems. Write us.

SEFTON FIBRE CAN COMPANY

Plants—St. Louis, Missouri • New Iberia, Louisiana

DISTRICT OFFICES: Los Angeles, San Francisco, Denver, Tampa, Chicago, Des Moines, New Orleans, Boston, Detroit, Kansas City, St. Paul, Omaha, New York, Cincinnati, Cleveland, Oklahoma City, Pittsburgh, Memphis, Nashville, Dallas, Houston, Salt Lake City, Seattle

EYE-APPEALING BAKELITE PLASTICS WILL PROVIDE

Serviceable Color for *Your* Packaging Needs

WHEREVER your product is used, you can give it not only added sales-appeal with a colorful Bakelite Plastic container, but also many other valuable characteristics that assure lasting attractiveness and efficiency of the package in service.

In selecting Bakelite Plastics for packages of the three diversified products shown here . . . Dental Gold, Face Powder and Fishing Line . . . the manufacturers gain numerous advantages besides lustrous self-contained color. Lightweight yet sturdy construction, ability to resist wear and moisture—as well as acids and alkalies, easy cleanability, permanently accurate design. These are some of the significant reasons why you, too, can profitably employ Bakelite Plastics for *your* packaging needs.

Bakelite Plastics are available in many types to meet varied requirements . . . in a wide range of colorful opaque, translucent and transparent effects. You can readily learn more about these versatile packaging materials by writing for illustrated booklet 23C., "A Guide to Modern Packaging".

BAKELITE CORPORATION, 30 EAST 42ND ST., NEW YORK

Unit of Union Carbide and Carbon Corporation

UCC

BAKELITE

TRADE MARKS

The word "Bakelite" and the identifying products Symbol are registered trade-marks of Bakelite Corporation

PLASTICS HEADQUARTERS

CEL-O-SEAL

TRADE MARK

bands add extra color and display value, at small-fraction-of-a-cent cost!

NO LONGER does package design stop with the bottle, label or closure. As these specimen packages show, a colorful "Cel-O-Seal" cellulose band can add the finishing touch that makes the package a stand-out on dealers' counters or shelves. "Cel-O-Seal" bands come in almost any combination of colors . . . in plain or metallic effects . . . in beautiful styles with half-tone pictures or designs. Yet they cost surprisingly little!

"Cel-O-Seal" bands also help protect packages from tampering, contamination or dilution. On liquor bottles they keep strip stamps securely in place. On food, drug and wine products they imply safety, assuring customers the contents are as good and pure as when packed.

We'll be glad to have our package stylists study your present container, and design or recommend an appropriate "Cel-O-Seal" band. No obligation. Write today.

DU PONT

CEL-O-SEAL TRADE MARK **BANDS**

Sold by

E. I. du Pont de Nemours & Co. (Inc.)
"CEL-O-SEAL" SALES • Empire State Building, N. Y. C.
Armstrong Cork Company
Glass & Closure Division, Lancaster, Pennsylvania
I. F. Schnier Company
683-689 Bryant Street, San Francisco, California

ANOTHER TOUGH PROBLEM

PROBLEM: W. C. Ritchie and Co. were commissioned to fabricate a transparent package. The design called for an extremely tough material that would die cut and heat form without cracking and, having been heat formed, would still be resilient and strong enough to hold tablets in a position where they would be readily accessible.

Ethofoil's THE ANSWER . . .

ANSWER: ETHOFOIL*. After other materials had been tried and failed because they lacked the desired characteristics of toughness and resiliency, ETHOFOIL was chosen. It did not crack or break during fabrication or assembly and retained its form and shape after repeated hard usage.

Among its other advantages ETHOFOIL has a low temperature, low humidity flexibility—is outstanding for easy printability—does not become brittle with age or discolored from light. ETHOFOIL'S low moisture absorption and stability to heat make it highly resistant to warping.

ETHOFOIL is freely adaptable to varying needs. It is available in thicknesses up to .020" and it can be supplied in sheets or rolls either transparent or colored. For more complete information write the Cellulose Products Division of

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

*Trade Mark Reg. U. S. Pat. Off.

DOW

There is still time to reserve your space in the 1941 Packaging Catalog. Deadline for reservations is midnight, October 15, 1940.

No need to describe the Catalog—you've seen previous issues. They've been beautiful, complete. The 1941 edition will be even more gorgeous, totally revised, brought up-to-date. The Catalog staff has been working with sustained drive for these many months to make the '41 volume top all previous efforts.

It will, therefore, be even more indispensable to the executives who receive it and use it during the subsequent year. They will consult it even more frequently in their day-to-day buying of packages, package parts and materials, packaging machinery, packaging services.

And, therefore, the important suppliers of these goods and services who place their advertising messages in the Catalogs will receive even more inquiries from these responsible firms, will write more business as the direct result of their advertising. There is still time to prepare your message for the Catalog. Consult your advertising agency *now* or have them consult our advertising service. We'll gladly pitch in and help you point your message directly to the big men of packaging.

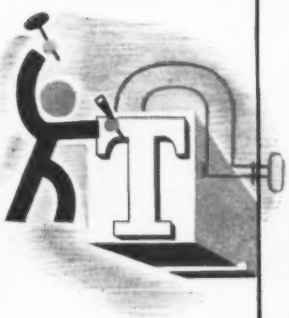
Not much time, though. Remember: Deadline is midnight, October 15, 1940. Reserve your space *now* for your sales message to packaging's leaders.

1941 PACKAGING CATALOG { **Breskin Publishing Corporation**
122 East 42nd St., New York City

TYPOGRAPHY • The trend in packaging design is toward simplicity, with increasing emphasis and reliance on type and hand-lettering. And containers done in this modern manner may well gain in good looks, attention-value, and sales-appeal, as *Continental* proves here.

Proper selection of type, skilful application of hand-lettering, is always a high point in *Continental* container design. But it is only one point; on all essentials, such as construction for easy filling and shipping, and convenient usage, *Continental's* staff is experienced, able.

Perhaps we can suggest improvements in your package which will add to the sales-appeal of your product. At any rate it costs you nothing to learn how *Continental's* packaging service would approach your problems.



One of a Series Devoted to Packaging Ideas. Copyright 1940 by Continental Can Company, Inc.

CONTINENTAL CAN COMPANY

NEW YORK · CHICAGO · SAN FRANCISCO · MONTREAL · TORONTO · HAVANA

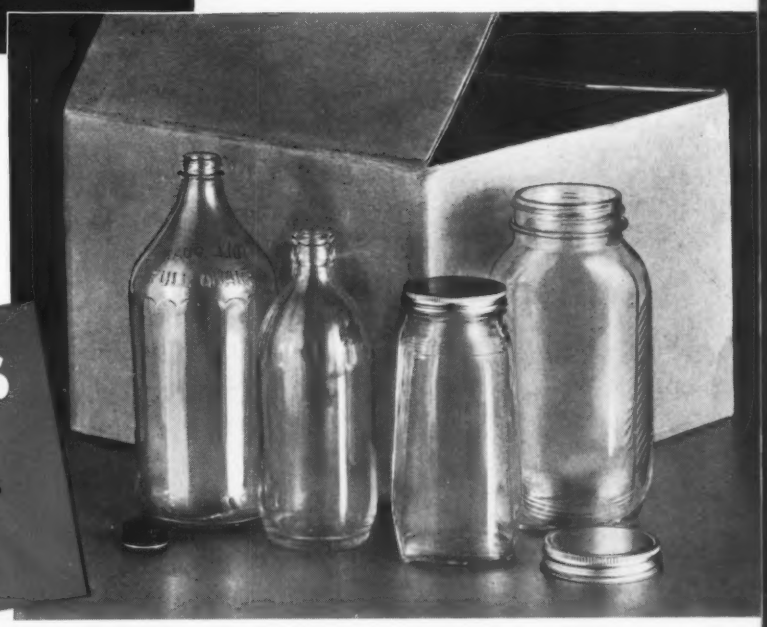
Is Your *Salespackage* a Headache to Any ONE of THESE THREE?

CONSIDERED a "honey" by consumers, a container could be a *headache* to your production man and still not cause "red ink" in your cost accounting.

Our unique *Salespackaging* service helps cure production headaches. In the field, O-I Marketing Men dig to uncover the kind of glass container and closure consumers want. Planning for its protection, O-I Research Men study your product's make-up. Then, using the *facts*, O-I Designers and Production Men create for you a *COMPLETE Glass Salespackage*—container, closure and shipping carton—that's tops in quality, low in cost.

If such down-to-earth packaging service appeals to you, talk today to an O-I representative. Owens-Illinois Glass Company, Toledo.

From left to right: O-I *Fluted Stubby Vinegar:* It has been materially reduced in weight but still holds a full quart. O-I *Quart Juice:* Shorter, lighter in weight, it is a consumer favorite for it fits conveniently into refrigerator and pantry shelves when packed with tomato, grape and other fruit juices. O-I *Tu-Vue:* It has one side symmetrically bordered, the other divided into 3 panels, making possible striking label effects. Its wide bottom area makes it rock-steady. O-I *Oval:* Its graceful lines give it the same rounded appearance at both base and top of the jar. All 4 containers can be completed with plain or lithographed O-I metal *Sales-caps*. We also supply plain or brand-printed corrugated cartons.



OWENS-ILLINOIS

Complete Packaging Service

CONTAINERS • SAFEDGE TUMBLERS • CLOSURES • SHIPPING CARTONS

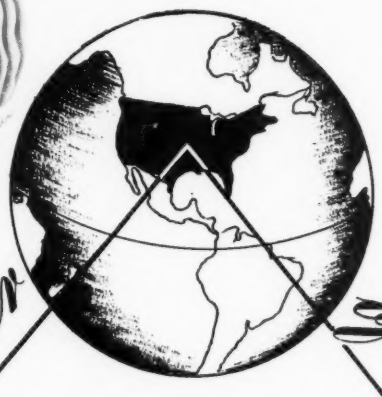
First in Glass

In O-I Salespackaging not one but THREE types of men work for you

O-I MARKETING MEN: report just what the final consumer wants in your *Salespackage*.

O-I RESEARCH DESIGNERS: mesh consumer preference with protection in your *Salespackages*.

O-I PRODUCTION MEN: devise dollar-saving short cuts in filling, cartoning and shipping.



America is the Center of World Packaging

America has led in the quality of packaging, in packaging innovations, in styling and in volume.

AND THE ALL-AMERICA IS THE HIGH-POINT OF AMERICAN PACKAGING

The All-America Package Competition annually turns the spotlight of public attention on American packaging. Thousands of manufacturers and merchandisers of every type of product enter their packages and displays. Package makers, machinery manufacturers, packaging material suppliers place samples of their wares in the Competition.

The reasons why America's leading packages and displays are to be found annually in the All-America are that the All-America stimulates packaging and display creation and builds prestige for the products entered by reason of the nation-wide publicity which attends every one of these great events. And it gives manufacturers an opportunity to judge their packages against those of other products, and gives buyers a chance to view the outstanding advances of the year.

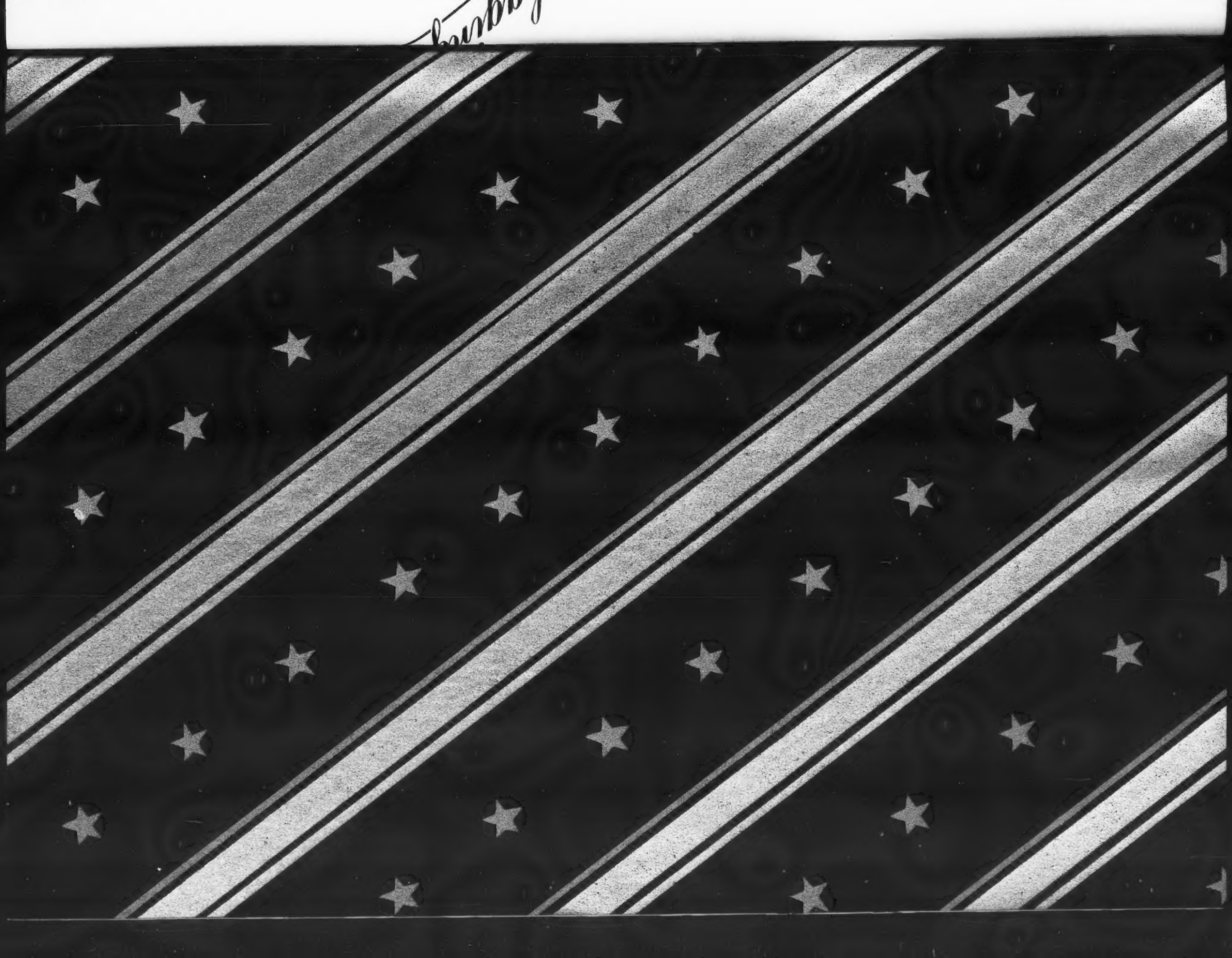
The entire competition is underwritten by Modern Packaging. There is no cost or obligation for entering as many packages and/or displays as you wish. Write for as many entry blanks as the number of entries you plan to make.

THIS WILL BE THE ONLY NATIONAL PACKAGE COMPETITION OF 1940

1940 ALL-AMERICA PACKAGE COMPETITION

SPONSORED BY MODERN PACKAGING MAGAZINE

CHANIN BUILDING 122 East 42nd Street NEW YORK CITY

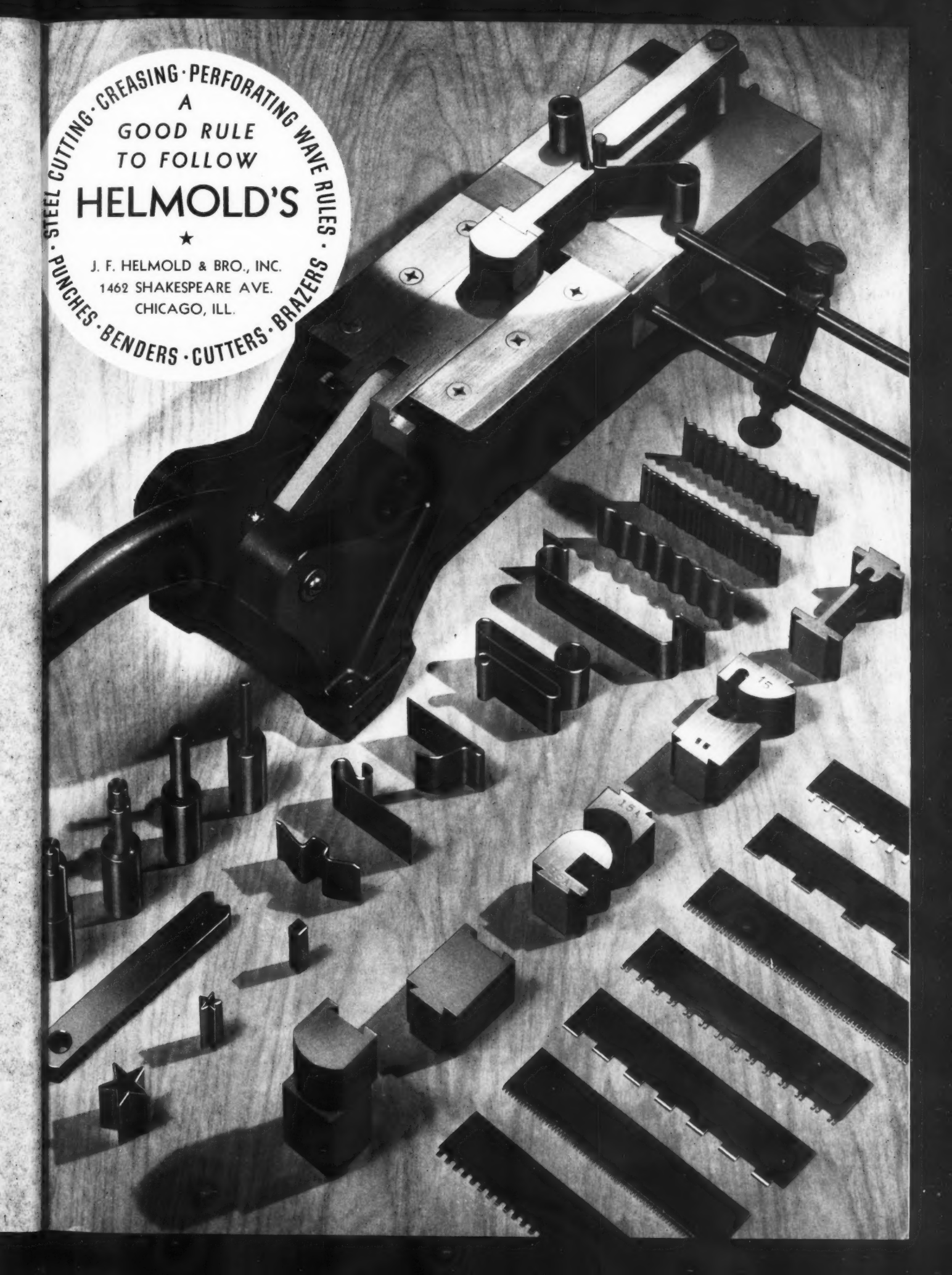


This new star and stripe pattern should be very popular because it is both attractive—and timely. We urge your consideration for up - to - the - minute packaging.

There are several color schemes available from stock—if you want some sheets for sampling we will gladly send them upon your request.

ROYAL PAPER CORPORATION
Manufacturers of Decorative Papers
ELEVENTH AVENUE AND 25th STREET
NEW YORK, N. Y.

This sample:
Pattern No. 594-2
Body stock—Rainbow Suede—Bagdad Blue


STEEL CUTTING · CREASING · PERFORATING WAVE RULES ·
A
GOOD RULE
TO FOLLOW
HELMOLD'S
★
J. F. HELMOLD & BRO., INC.
1462 SHAKESPEARE AVE.
CHICAGO, ILL.
· PUNCHES · BENDERS · CUTTERS · BRAZERS ·

A Wine CELLAR *That is a Wine* SELLER!

HERE'S a Federal Carton that illustrates the unusual applications of sound merchandising ideas which are typical of all of our cartons. This display box is a folding carton, beautifully printed in four colors (including gold). It is strong, durable. It will protect its contents during shipping.

Arriving at the store, the dealer merely lifts the cover and presto! he has a complete display, ready for setting-up on the counter. Shewan-Jones, Inc., subsidiary of National Distillers Products Corp., have packed four different types of their wine (Port, Sauterne, Claret, Sherry) which are neatly held in place with each bottle getting prominent display. The customer comes along. He buys not *one* bottle, but *four!* He gets a whole wine cellar in one neat package that needs only wrapping paper to ready it for carrying.

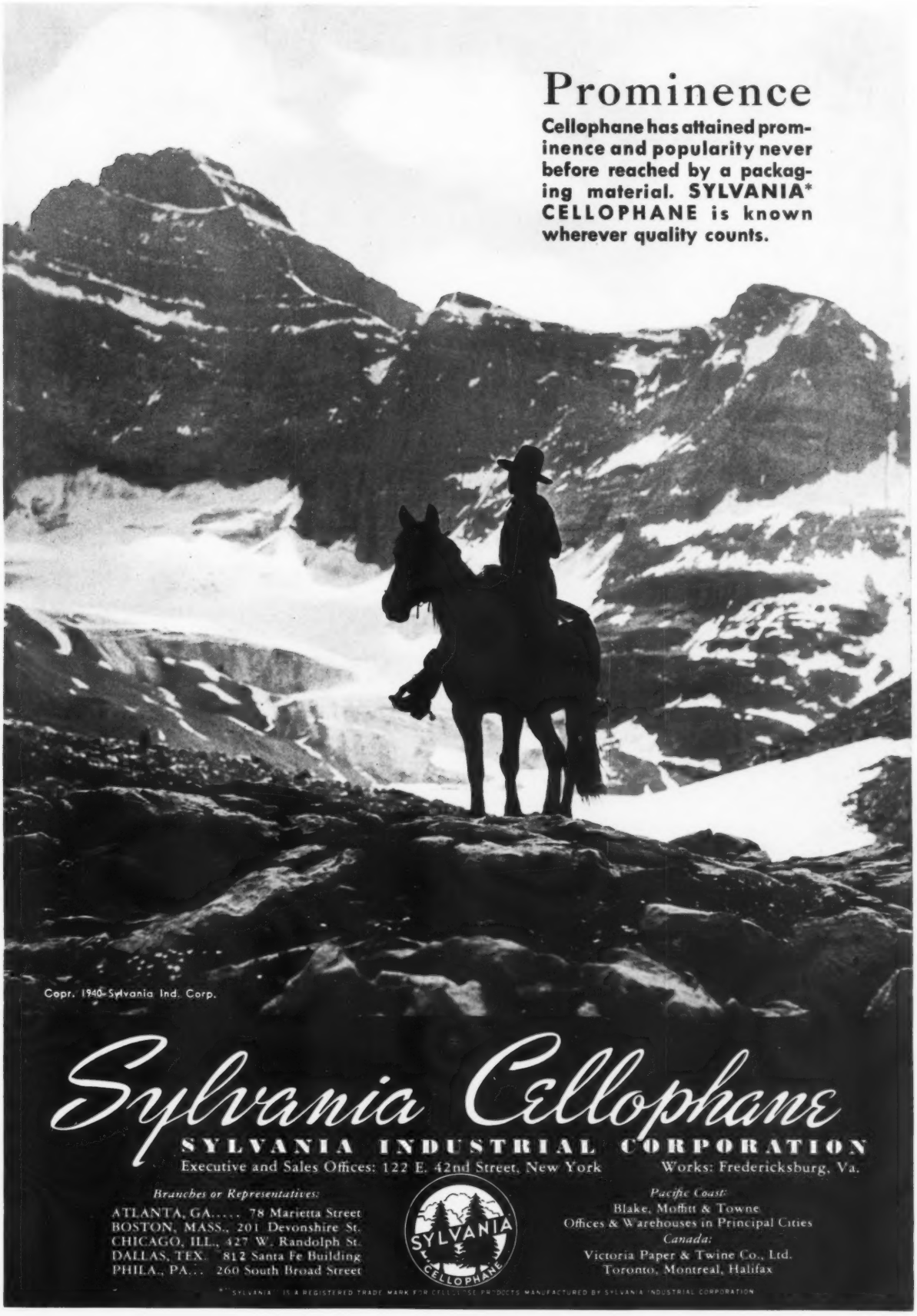
This display-carry home carton is, as we said, typical of the unusual designs in folding cartons constantly being produced by Federal. Strong, beautiful, economical Federal Cartons are the answer to *your* packaging problem.

Write for further information without obligation to

FEDERAL CARTON CORPORATION

MANUFACTURERS OF CARTONS OF ALL TYPES, SHIPPING AND DISPLAY CONTAINERS, SPECIALTY, CORRUGATED DISPLAYS

638 WEST 57th STREET • COLUMBUS 5-4643 • NEW YORK CITY


Prominence
Cellophane has attained prominence and popularity never before reached by a packaging material. SYLVANIA* CELLOPHANE is known wherever quality counts.
Copr. 1940-Sylvania Ind. Corp.
Sylvania Cellophane
SYLVANIA INDUSTRIAL CORPORATION
Executive and Sales Offices: 122 E. 42nd Street, New York
Works: Fredericksburg, Va.
Branches or Representatives:
ATLANTA, GA..... 78 Marietta Street
BOSTON, MASS., 201 Devonshire St.
CHICAGO, ILL., 427 W. Randolph St.
DALLAS, TEX. 812 Santa Fe Building
PHILA., PA... 260 South Broad Street
SYLVANIA
CELLOPHANE
Pacific Coast:
Blake, Moffitt & Towne
Offices & Warehouses in Principal Cities
Canada:
Victoria Paper & Twine Co., Ltd.
Toronto, Montreal, Halifax
* "SYLVANIA" IS A REGISTERED TRADE MARK FOR CELLULOSE PRODUCTS MANUFACTURED BY SYLVANIA INDUSTRIAL CORPORATION

the ADVANTAGES of THE SIMPLEX BOX

SHIPPED FLAT

EASY TO ERECT
A simple bend
An easy turn
Click! It locks into place!

READY TO USE

greater attractiveness and greater durability

+

greater compactness and greater economy

Frankly, we've made Simplex boxes to fill the gaping void between the set-up box and economical folding carton.

Fortunate for you, we've engineered these packages so that they **take over the outstanding advantages of both these types of boxes.** Simplex paper boxes combine the attractiveness, the durability of the set-up box . . . and the economy and compactness of the folding carton!!

Simplex boxes are made **in one or two-piece construction to meet the needs of every manufacturer and every product!!** Strong, handsome, easily assembled, bringing economies all along the line, they're the logical package for **your** product!

If you're bothered with a packaging problem . . . a storage problem . . . cost problem . . . Simplex boxes are your answer.

SIMPLEX PAPER BOX CORPORATION
LANCASTER PENNSYLVANIA

SIMPLEX

Trade Mark
Made Under License In All Parts Of The U. S. A. And Canada

The goal in football—touchdowns. The goal in packaging—Sales! Ribbonette can help you to achieve that goal.

Your package, to win, must be attractive: the luster of specially processed fine cotton yarns, the clarity of coloring, the perfection of workmanship in Ribbonette will enhance the beauty of that package.

Your package must be complete, its various parts combining into a harmonious unit: the color and design flexibility of Ribbonette give almost unlimited possibilities of fitting it precisely to your package.

Your package must make gains—"fumbling" means lost sales. The *right* Ribbonette, attractive, suitable, correct in width (3/16" to 1-1/4" wide), secure in strength, may be what you need to achieve your packaging goal.

Send us one of your packages and let us tie it for you with Ribbonette.

CHICAGO PRINTED STRING CO.

2320 Logan Blvd.,
Chicago, Illinois

225 Fifth Ave.,
New York

1915—Twenty-Five Years of Progress—1940

LET EXPERTS

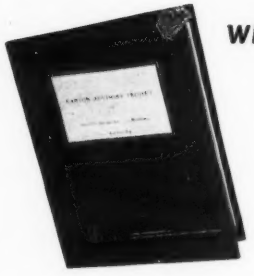
Put a finger on your carton problem!

Send your problem to the Gardner-Richardson Carton Advisory Council . . . let these experts help you find the answer.

DON'T let your folding carton problems put wrinkles in your brow . . . place them before Gardner-Richardson's experts for analysis and study. The recommendations you get from these men may show you the way to increased sales through greater carton effectiveness—to lower costs through carton economies.

The ten experts of the Gardner-Richardson Carton Advisory Council know the possibilities of boards and printing . . . the chemistry of inks . . . how to get better filling machine performance. They have an intimate knowledge of retail display . . . of product protection . . . and they are practical when it comes to costs.

It only costs a three-cent stamp to place your problem before these folding carton specialists . . . and a detailed report of their findings will be placed on your desk, without any obligation.



WRITE FOR THIS BOOK TODAY!

Get your copy of Gardner-Richardson's "Carton Problem Organizer," which makes it easy for you to organize and present your carton problem to the Council for consideration. Write today.

RE-DESIGNING FOR SALES!

A new design or the modernization of your present one may give your carton greater shelf-appeal. Put it up to Gardner-Richardson's staff of artists.

The GARDNER-RICHARDSON Co.

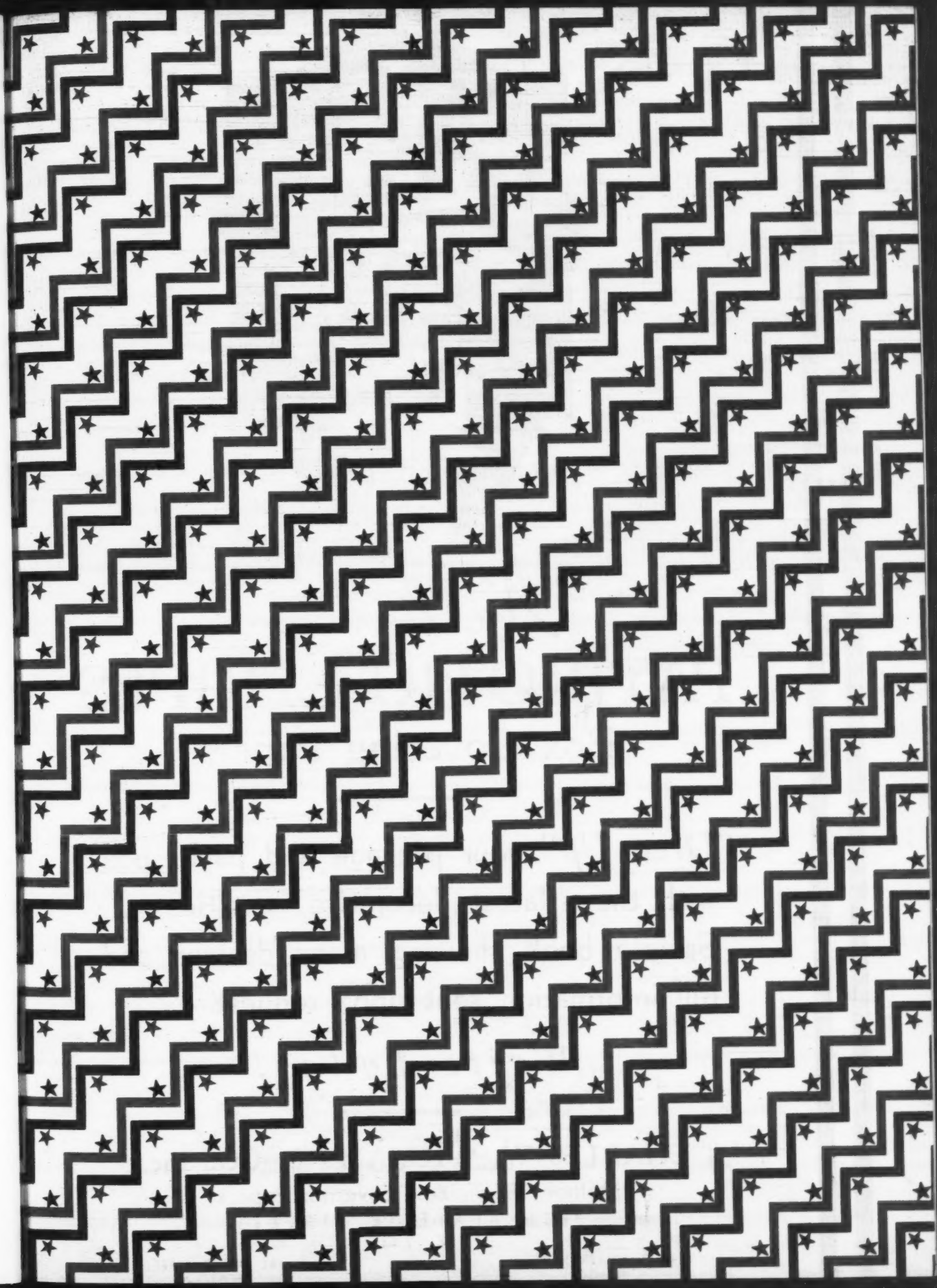
Manufacturers of Folding Cartons and Boxboard

MIDDLETOWN, OHIO

GARDNER-RICHARDSON — FROM PULP TO FINISHED PRODUCT — ENGINEERED PRECISION

***THIS SYMBOL** is your assurance of greater uniformity, higher quality, better appearance, better product protection—profit and satisfaction.*

Sales Representatives in Principal Cities: PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • NEW YORK • BOSTON • PITTSBURGH • DETROIT



Williams

PATRIOTIC STRIPES

Box Covering Papers

"Dress Up" your package and paper box with these latest decorative novelties . . . Sample book showing many designs and full information sent upon request.

Write Today!

CHARLES W. WILLIAMS & CO., Inc.

Authorities on Box Covering Papers

303 LAFAYETTE STREET
NEW YORK

624 SO. MILLER STREET
CHICAGO

167 OLIVER STREET
BOSTON

A NEW "Cotton Picker"

Sterilized BY HEAT!

A great new packaging achievement—A great new selling feature for the famous Bauer & Black package by Ritchie

ONCE AGAIN the "Cotton Picker" makes notable packaging news! An innovation in cotton merchandising only a few years ago, it now adds another important feature — heat sterilization — to its outstanding attractiveness, neatness and utility.

If *you* have a hard-to-package product, you will appreciate both Ritchie's technical skill and keen sense of your package's merchandising value. Investigate Ritchie's complete and economical manufacturing facilities, and versatile design service, before you buy *any* type of Set-up Paper Box, Fibre Can or Transparent Package.

Live Steam sterilizes the cotton in its improved package. Careful construction and especially developed adhesives make it possible for the package to withstand the terrific heat and pressure. A transparent film protects the cotton and keeps it sterile until the buyer opens the package. Here is another example of Ritchie's unique ability to combine features of Set-up Paper Boxes, Fibre Cans and Transparent Packages into **one** package that sells!

SET-UP PAPER BOXES
FIBRE CANS
TRANSPARENT PACKAGES

W. C. Ritchie AND COMPANY

8849 BALTIMORE AVENUE • CHICAGO

NEW YORK DETROIT LOS ANGELES ST LOUIS ST. PAUL DENVER MIAMI

FOR YOUR OFFICE WALL

—THESE FOUR FAMOUS AMERICANS

OUR GIFT TO YOU

If you want inspiration, and who does not, why not dictate a brief "yes, send 'em along" to your secretary now—and we will send you these four Lupas charcoal and crayon reproductions with our compliments. Luis Lupas, with all the sensitive genius of a great master, has superbly captured the characters and personalities of these four men.

They are yours, all four of them (plate size 11 x 14), if you will simply ask for them on your letterhead.

P.S. You will want to hang at least three of them.

MERIT DISPLAY CARD COMPANY

Window and Counter Displays for Greater Sales at Point of Sale

36 West 20th Street **CHelsea 2-4217** **New York City**

BOTTLES *like these* *at practically* STOCK PRICES

Here are seven bottles of artistic and distinctive design which you can buy at practically STOCK prices. Although the actual bottles are not carried in stock, the moulds are already available and your order can be produced without involving any "special mould" cost.

In addition to these 7 designs, a number of other highly individual bottles are available on the same basis. Our representative will be glad to show you samples and quote on your requirements.

SWINDELL BROS., BALTIMORE, MD.

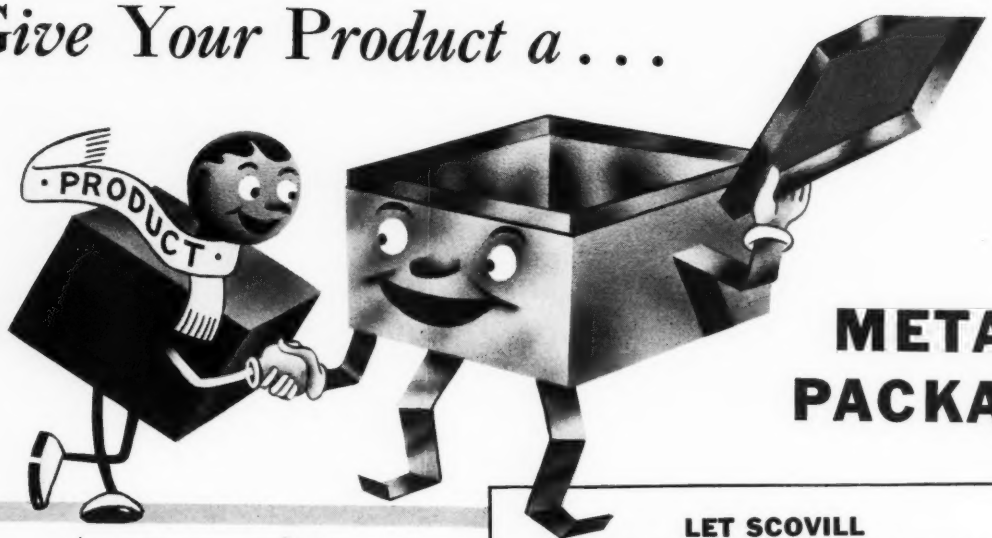
200 FIFTH AVENUE, NEW YORK

ROBERTO ORTIZ—HAVANA, CUBA

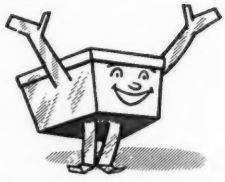
When you think of bottles think of

Swindell

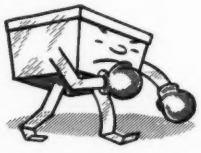
Give Your Product a . . .



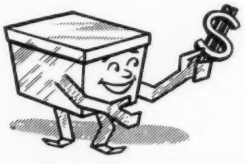
METAL PACKAGE



1 You'll have increased *Sales Appeal,* due to the attention value and quality appearance of metal.



2 Your product will be *safer from damage* in transit because the metal container withstands rough treatment.



3 You can often *save on transportation costs* as light-gauge metal protects better than other heavier packaging media.

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LET SCOVILL HELP YOU DECIDE ON METAL

Scovill's long experience with metal packaging, particularly for drugs and cosmetics, and its staff of designers . . .

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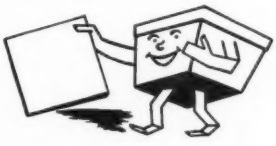

and special processes like Indurited aluminum (moisture, heat, scratch resistant) . . .

make Scovill your logical source of supply for metal* packages. Have Scovill look over your new packaging idea—sketch, blueprint or model. We'll give you an estimate without obligation. Write 25 Mill Street, Waterbury, Conn. or the nearest branch office.

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MODERN PACKAGING

OCTOBER 1940 VOLUME 14 NUMBER 2

A Survey BY THE INSTITUTE OF PACKAGE RESEARCH

PACKAGE TESTING

Readers will find this survey divided into three parts, namely, the testing of the physical characteristics of packages, the testing of package design for consumer and dealer reaction and the testing of the effectiveness of displays. This last portion of the survey appears on pages 77, et seq.

This study has been conducted with a dual purpose in mind. We have aimed, first, to discover, report upon and analyze the testing procedures which are followed by those companies which have carried on extensive work in this field. We have attempted, secondly, to analyze the future potentialities of testing and to show our readers, by example, how they may set up their own testing procedures by modifying the practices of others to conform to the necessities of their own problems.

Testing of Physical Characteristics

The most accurate and the most scientific portion of the testing field, as it applies to packages and displays, is that in which physical and chemical characteristics of packages are tested. Such tests are conducted by the control laboratories and the development laboratories of package making companies. Many large packagers maintain their own laboratories in order to test the suitability of proposed packaging materials and packages in terms of their own specialized problems.

Finally, there exists several well-equipped testing laboratories which have specialized in package testing.

We are indebted to one such laboratory, New York's Container Testing Laboratories, Inc., for the detailed data which follows. While not all-inclusive, this describes, in layman's terms, the basic tests and the equipment used in conducting them. A number of case histories of the application of such tests are likewise cited. We are particularly indebted to Messrs. Albert W. Luhrs and Alfred W. Hoffman of Container Testing Laboratories, Inc., for their fullest cooperation in compiling and correlating this data and for the majority of the illustrations on the following pages.

A necessary preliminary to all testing operations is an adequate seasoning of samples by maintaining them in a conditioning room, as illustrated. Here the samples are exposed to a carefully controlled atmosphere of predetermined temperature and relative humidity. This atmosphere is usually maintained to approximate average nation-wide atmospheric conditions, but there are provisions for varying the relative humidity or temperature to correspond to unusual conditions which might be encountered.

The importance of such seasoning can be appreciated when it is understood that the strength characteristics of materials—whether uncombined or fabricated into boxes—vary greatly depending upon the atmospheric conditions to which they have been exposed. Given physical properties of samples may be raised or lowered as much as 80 per cent by a 25 per cent change in the relative humidity of the atmosphere to which they have been exposed.

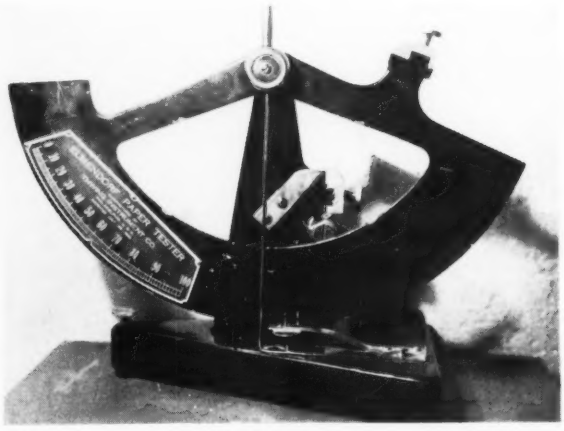
In view of the effect of atmospheric conditions on strength characteristics, it is necessary to season samples before testing not only to approximate atmospheric conditions which they might encounter in actual service, but also to provide a basis for comparison with similar tests performed on different occasions.

A series of tests, performed for the National Container Assn. in connection with that organization's research program on fiberboard poultry boxes, illustrates the use and need of proper conditioning facilities. Twenty-four different types of boxes, varying as to style, size, and kind of materials, were under consideration in a quest for that container which would be most rigid under actual service conditions of extremely damp atmosphere. Exposure of several boxes of each type to a relative humidity of 90 to 95 per cent for periods ranging from four days to two weeks, followed immediately by compression tests, established which type was best suited.

★ ★ ★

TEARING TESTS are made on a standard Elmendorf Tearing Tester and determine the tearing resistance of a material. Test specimens cut to a specified length are torn by a pendulum action. An indicator records the amount that the free swing of the pendulum is retarded by the tearing of the specimen.

This instrument can be used to test the same range of products mentioned in connection with the Mullen tester. As an illustration of the tearing tester's application, work performed for the New Haven Pulp & Board Co. might be cited. This concern is one of the suppliers of Pepsi-Cola carriers, fibreboard blanks designed for easy transportation of six bottles of the beverage. The blanks are die-cut in such a manner that the weight of the contents will cause them to tear unless the inherent tearing resistance of the board is completely adequate.

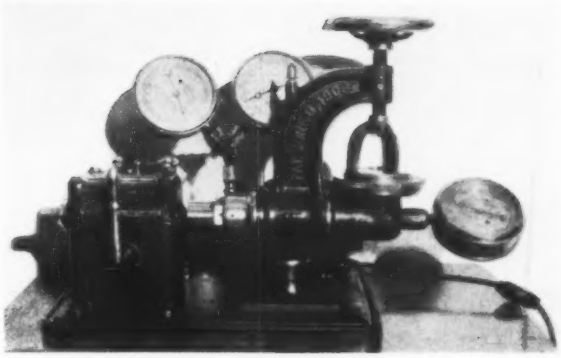


BURSTING STRENGTH TESTS

In addition to the strength properties of finished containers, it is usually necessary to determine as well various physical characteristics of the material used in the manufacture of such containers. Thickness and weight are two such common characteristics and these are measured by means of various types of calipers, micrometers and scales. Two types of balances and an automatic micrometer can be seen in the illustration of a conditioning room (top of page 36). The scales, in conjunction with an oven, are also used to determine moisture content and dry weight.

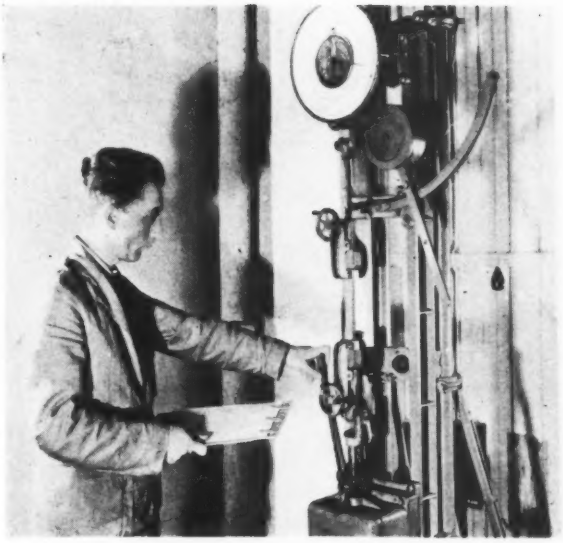
Another property frequently determined is bursting strength, for which a Mullen or Cady Tester, operated either by hand or electrically, is used. Operation of the machine causes hydraulic pressure to be exerted on a rubber diaphragm with a circular area of approximately one square inch. The resultant upward bulge of the diaphragm causes it to puncture the specimen and the force required for the puncture is read from a dial.

While this test is usually associated with fibreboard containers because of the Consolidated Freight Classification bursting strength requirements for all such containers used in rail shipments, it is equally applicable to such diverse articles as sealing tape, cellophane or similar wrapping materials, metal foil and all types of paper and paperboard products.



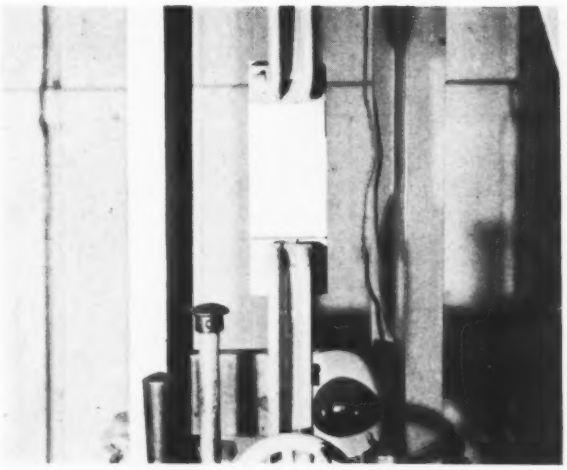
TENSILE TESTS

determine the tenacity of the fibres comprising a sample and is performed by clamping the ends of a specimen of known length and width between two jaws of an electrically-driven machine. The operation of the machine pulls the jaws apart and the force required to rupture the sample is read from a dial. In addition to the articles previously listed as being adaptable for bursting strength and tearing tests, rope and twine also are tested on this instrument.



JOINT TESTS

are likewise performed as a common application of the tensile machine. This test simulates the stresses originating from within a box on the tape covering the manufacturer's joint. In making this test, a strip of tape 2 in. wide and 2 in. long is applied to two abutting pieces of corrugated fibreboard in the same manner that tape is normally applied to the two abutting ends of a box blank to form the manufacturer's joint. The two pieces of corrugated board are then pulled apart in the tensile machine in a direction at right angles to the length of the tape. The force in pounds required to completely rupture the joint is recorded. Failure of the joint may occur if the tape breaks along its length, if the cloth separates from its backing or if the linerboard to which the tape was affixed tears.



SCUFFING TESTS provide a measure of the resistance of a material to scuffing and surface peeling resulting from continual rubbing with a similar material. Such rubbing is frequently encountered in transit when two adjacent boxes with surfaces in contact are kept in continual motion due to jouncing, etc., of the vehicle in which the containers are being transported. The test is made by rubbing together mechanically two identical specimens with their outer or finished surfaces in contact and under a pressure of 0.2 lbs. per sq. in. at maximum contact area. The number of double strokes required to produce peeling of the surface of one of the two specimens is noted as the point of failure.

A typical problem calling for the use of scuffing tests was presented by Edgar Steiner & Co., Inc. This organization was interested in obtaining a highly-glossed wrapping label for use on tight-wrap boxes. Three samples were found to satisfy all requirements but scuffing tests showed that one was far superior to the others in this characteristic.

WATERPROOFNESS TESTS on folding board are performed by fashioning the sample into a trough or tray with the finished surface innermost. Water is then poured into the trough or tray and the time required for it to penetrate the board—as noted by water stains on the exterior surface—is an index of the waterproofness.

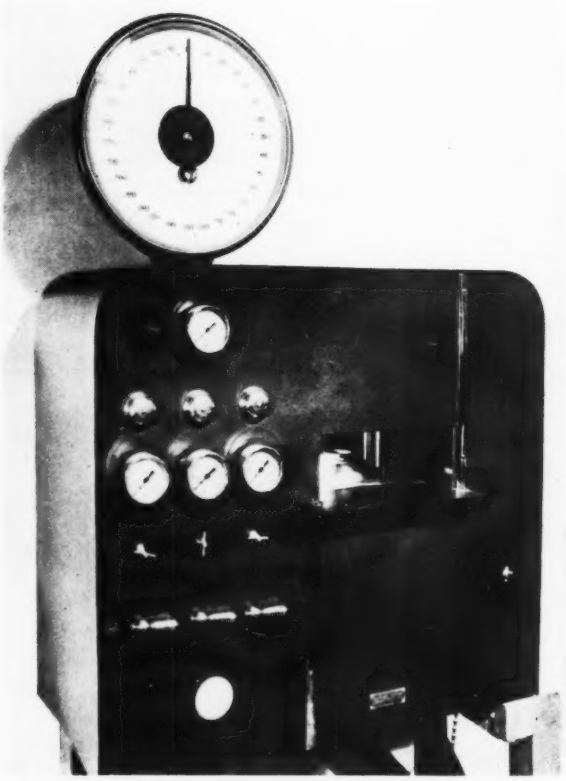
RING-STIFFNESS TESTS measure the stiffness or rigidity of paper or paperboard and are particularly valuable in establishing the rigidity of uncombined liners and corrugating material before they are fabricated into single or double-wall board and boxes. A specimen is cut 6 in. by $^1/_2$ in. and inserted into a grooved holder so as to form a ring or collar 6 in. in circumference. Specimen and holder are then placed between two small flat plates of the ring-stiffness tester.

The latter is a small compression machine in which compressed air is used to raise the lower plate against the fixed upper plate. The force required to crush the specimen is transmitted directly to a platform scale which records it on a dial. The rigidity of the material being tested is measured both in its machine direction and across its machine direction.

By using a different holder which causes the sample to bow into an arc instead of forming a ring, the machine illustrated can also be used to test solid fibreboard.

In addition to evaluating the rigidity of paperboard materials as such, the results are especially useful when the materials tested are to be converted into fibreboard shipping containers. This is obvious when it is appreciated that, for any given efficiency of fabrication, the rigidity of the containers will vary directly with the rigidity of the materials used in their manufacture.

It is for the latter reasons that both the Southern Kraft Corp. and The Mengel Co. have ring-stiffness tests performed.



MOISTURE-PROOFNESS TESTS

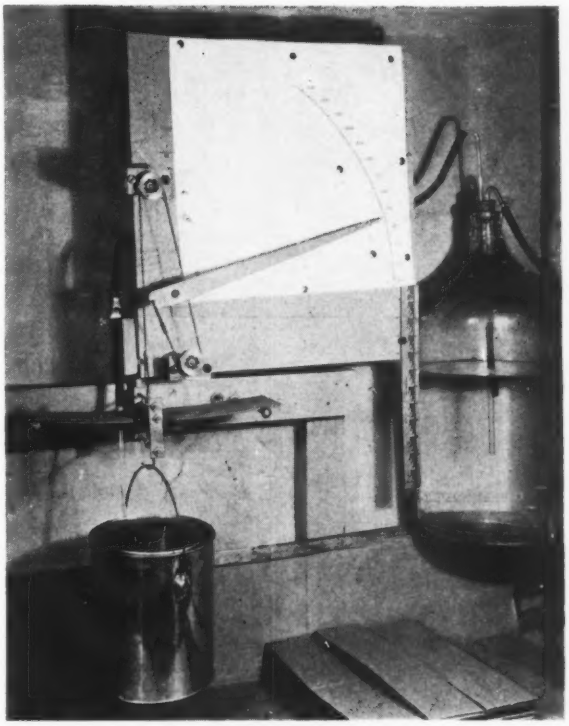
to measure the resistance of a sample to the penetration of moisture vapor are performed by fitting a specimen of known area into an air-tight metal cup containing calcium chloride. The specimen is suspended 1/4 in. from the cup bottom by means of an air-tight, moisture-proof seal. The cup is then placed into an atmosphere of 65 per cent relative humidity at 70 deg. F. and the specimen, therefore, is exposed to this atmosphere on one side and to an atmosphere of close to 0 per cent relative humidity on the other. The difference in potential causes moisture-vapor to penetrate the sample, the exact amount being determined by periodic weighings on a chemical balance.

Essentially the same procedure is used to test the moisture-proofness of folding and tight-wrap boxes. A known amount of calcium chloride is introduced into the package through an aperture and this aperture is then closed with an air-tight, moisture-proof seal. Increases in weight caused by the penetration of moisture-vapor into the package are established by periodic weighings.

The International Salt Company frequently arranges for tests of this nature on its salt packages, either to check the quality of old styles or in research work. A given degree of moisture-proofness having been established as a specification, the merits of new styles are judged on the basis of their moisture-proofness with respect to this specification.

BEAM TESTS

measure the resistance of corrugated fibreboard to buckling when subjected to bending loads. A test piece 3 in. by 14 in. is laid across two rods 12 in. apart and the load applied to the top of the specimen at midspan by means of a saddle supporting a container into which water flows at the rate of one pound per minute. A stop watch, running as the test is in progress, shows the load in pounds being applied to the specimen at any time and a pointer, attached to the loading saddle, indicates the deflection of the beam from the horizontal. This test is made with the corrugations both parallel and perpendicular to the length of the beam.



TESTING DISPLAY STANDS

With the increasing use of fibreboard display stands has arisen the need for rigidity specifications on such articles as well as on shipping containers. This is particularly true where commodities of some weight are stacked thereon, especially since the design of such stands frequently precludes the possibility of providing the same rigid support found in corrugated fibreboard boxes.

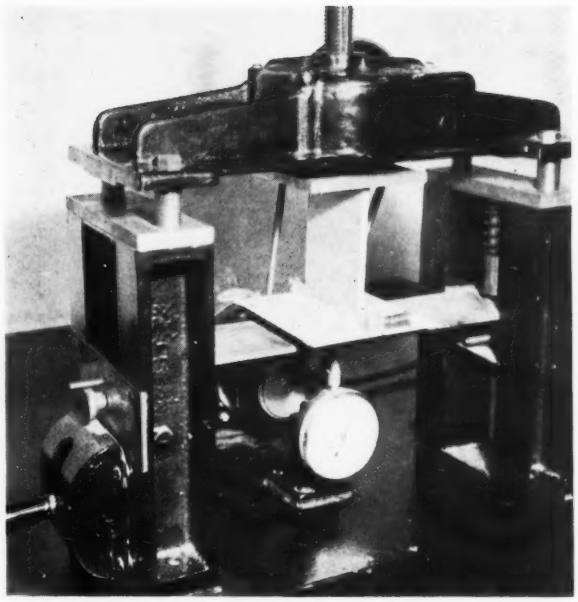
As illustrated, the display stands are set up for test in such a way that the compressive force is exerted directly on the surface used for stacking the products to be exhibited.

COLUMN TESTS

measure the strength of corrugated fibreboard when loaded as a column. A specimen of combined board 4 in. high and 3 in. wide is placed upright in a small compression machine and pressure applied by means of an electrically-driven platen moving at the rate of 2.5 in. per minute. The load in pounds required to cause collapse of the column is read from an attached dial. The test is always made with the corrugations running parallel to the height of the column.

Two other tests—flat crush and adhesion—are also performed on this same machine. The former measures the force required to crush the corrugations in a sheet of combined board. A specimen 3 in. by 3 in. is tested, pressure is applied to the flat surfaces and the load required to cause the corrugations to collapse is noted.

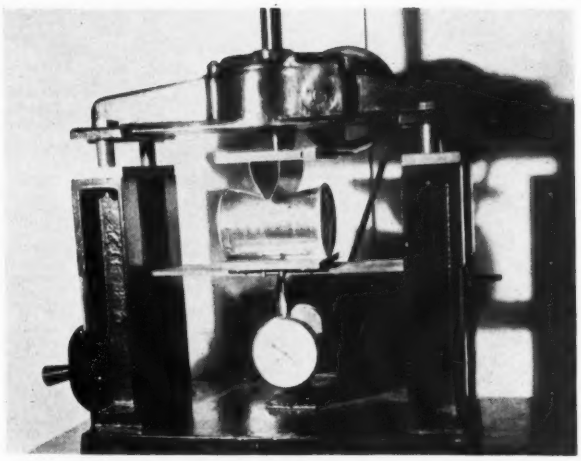
The adhesion test is an index of the strength of the bond between the corrugated sheet and the facings of combined board. The rupture of the bond is caused by applying pressure at right angles to steel pins inserted into the corrugations of a specimen of combined board containing a total of eleven rows of adhesive on both facings, each 2 in. in length. The force in pounds required to separate the corrugated sheet from either or both facings along at least five rows of adhesive is noted.



SIDE WALL RESISTANCE

Still another application of this small compression machine is its use in determining the side wall resistance of cans. As illustrated, the can is compressed against the apex of a triangular form which causes the side wall to be forced inward. An attachment on the machine measures the deflection or distance that the side wall is dented inward and a record is kept of the force in pounds required to produce each 0.1 in. increase in deflection. The tests are made on sealed cans, either empty or filled.

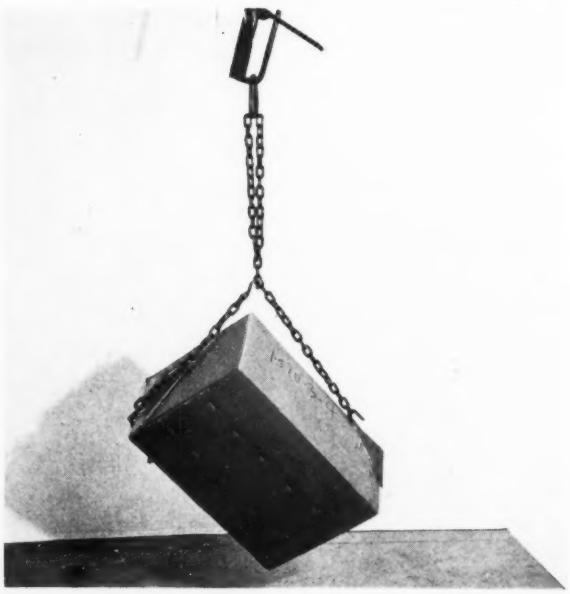
The Quaker Maid Company, in a program to reduce the incidence of dented cans, sponsored many such tests in order to establish a side wall compression specification for cans.



THE DROP TEST

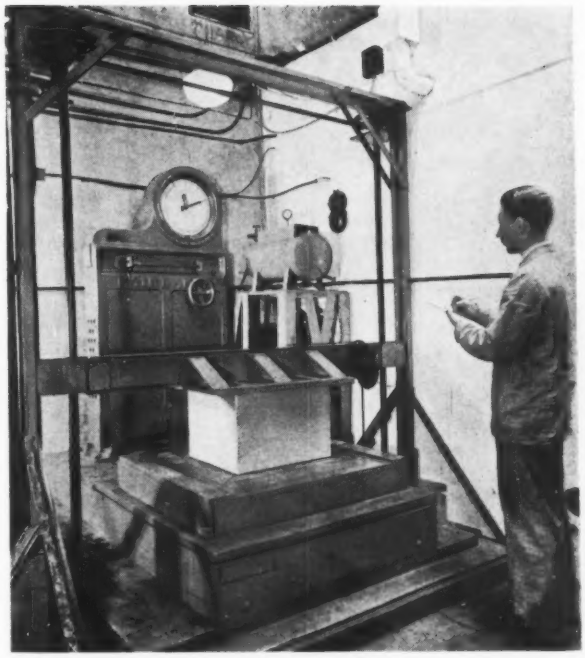
consists of releasing a loaded container from a known height onto a concrete floor. The height can be varied and the test can be arranged so as to have the box fall on any desired part. After testing, box and contents are examined for damage.

A program of tests conducted on corrugated shipping containers for table model Emerson radios showed how drop tests frequently constitute a valuable adjunct to drum tests. After the former had failed to disclose a significant difference between two manufactures of boxes, drop tests were performed. The results showed that the interior packing of one manufacture was inadequate, resulting in cracking of the plastic shell.



COMPRESSION TESTS are among the most common applied to shipping containers. These subject the containers to compressive forces similar to those to which they may be subjected while enroute in freight cars and when stored in warehouses. Each container is tested individually in the large compression machine, which consists of a platform scale over which a power-driven cross-beam is mounted. The container to be tested is placed between two flat surfaces (one, the scale platform and the other, a plate under the cross-beam) and the applied pressure is read upon an attached dial at each 0.1 in. increase in the deflection or distance that opposite surfaces of the container are forced together. This test is made on empty containers which have been sealed both top and bottom.

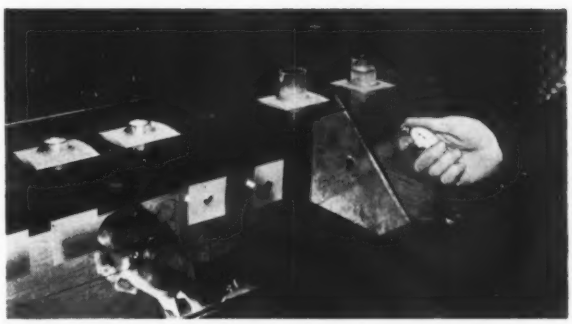
One of the most interesting uses of compression tests was supplied by E. I. du Pont de Nemours & Company in connection with the construction of a new warehouse for the storage of cones of Nylon yarn. These cones are shipped in corrugated fibreboard boxes and tests were made to determine the compressive resistance or rigidity of these boxes. Once this had been determined, it was an easy matter to establish the safe stacking height of such boxes and the height of the warehouse was fixed accordingly.



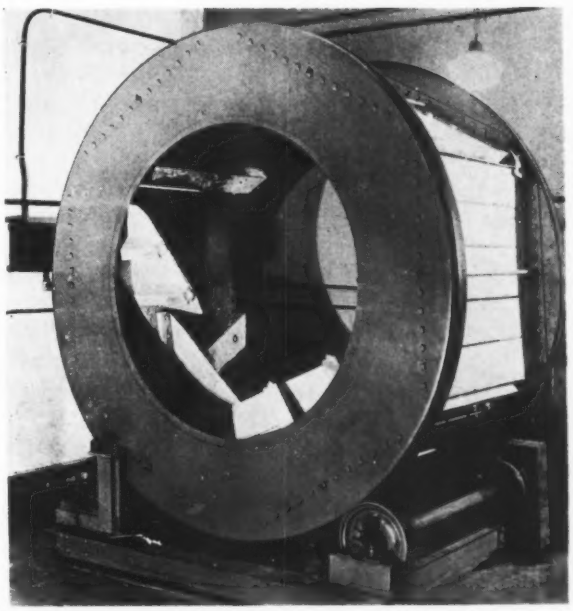
GREASEPROOFNESS TESTS measure the resistance of a sample to the passage of grease. It is performed by placing a medium such as turpentine or a combination vegetable-animal mineral oil (depending upon the material being tested) on one surface of the sample—which is placed on a raised glass shelf—and determining the time required for the medium to penetrate the sample and spot the other surface.

A modification of this procedure provides for waterproofness tests on small samples or on non-folding board. A glass cylinder is mounted on each specimen with a waterproof seal and is then filled with water. Methyl violet, an indicator which changes color when treated with water, is then sprinkled on that part of the glass shelf on which the specimen is to be placed. The time required for the water to penetrate the specimen and produce a color change in the indicator is then noted.

The Empire Central Box Corporation, as an illustration, resorted to greaseproofness tests to check the resistance of its folding packages designed for Kerr's Butterscotch candy.

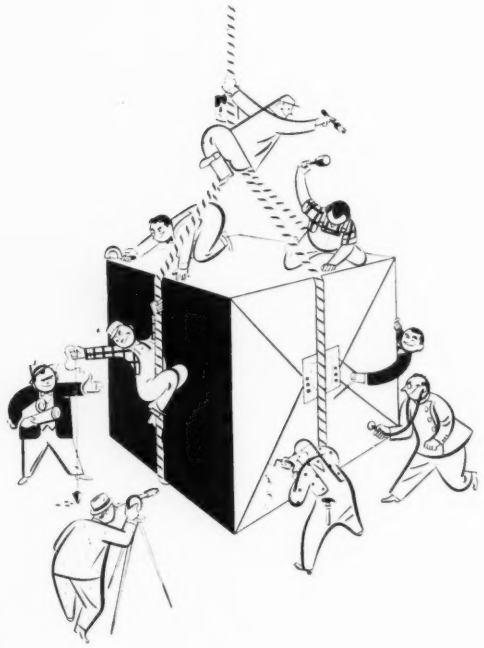


THE SMALL REVOLVING DRUM subjects a loaded container to treatment closely simulating handling during transportation. The machine used in this test is a seven foot hexagonal drum resembling a large barrel placed on its bilge. On the inside faces of the drum is arranged a series of baffles which cause the container to fall on its various (*Continued on page 112*)



Testing Package Design

for consumer and dealer reactions



To test the physical characteristics of a package may require long and tedious laboratory work. Yet the problem is a relatively simple one, since scientific standards may be set up and scientific means of measurement may be utilized. The human factor can be largely eliminated.

In contrast, the testing of packages is a far more difficult job and one requiring different techniques and a different approach. It is perhaps for this reason that no fixed standards exist and testing is done—by that fraction of packagers who do it at all—largely on the basis of erecting a special testing structure to solve each problem as it comes up.

The fact is that most companies and most designers are in no position to undertake extensive tests. To most manufacturers the value of testing has not been sufficiently proved and the technique has not been sufficiently far developed to seem to offer returns of a value proportionate to their cost. Yet enough work has been done in the field to indicate that testing undoubtedly has a future, though that future may be limited to certain categories of products and certain manufacturing groups. It is the purpose of this survey to classify the work that has already been done and to evaluate it, as a preliminary requisite if further work is to proceed.

Design testing falls into three broad categories:

1. Testing by Consultation—either with selected executive employees considered as experts, selected jobbers and retailers likewise considered as experts by virtue of their position in the field or with employees selected from office and factory staffs and considered as a restricted sample of the average consumer group.
2. Testing by Formula—a number of designers and some manufacturers have set up systems of testing whereby a package may be measured with greater or less accuracy against a series of qualities (or desirable features) which would be possessed to the fullest degree by the perfect package. Such testing measures are not the consumer's actual reaction (either in sample or in mass), but rather the correlation between the proposed package and an "ideal" deduced by a process of reasoning, presumably on the basis of previous experience.
3. Testing by Field Sampling—this type of testing places the proposed package or packages into the actual channels of trade and judges the effectiveness of the package or packages either by comparison with each other in terms of sales results or by comparison with the predecessor package.

Although the three methods are designed to achieve identical ends, it will be noted that the means adopted differ greatly in a number of respects, particularly in regard to cost and time elapsed before completion of the testing period. Each method has its weaknesses and its advantages. The case on behalf of Testing by Consultation is perhaps best phrased by one large manufacturer who does not conduct advanced consumer or dealer tests and who believes that the latter are of little value. He states: "We believe we know the 'elements' in design that will appeal. We believe the surprise element also has a value, because I have known of instances in other fields where a dealer claimed he had seen 'something like that' before, without realizing it was submitted to him in a 'test.' We also believe that design considerations must, of necessity, come under the decision of experienced people—people who seem to know what the public likes."

It is significant that this company is one which in its highly competitive field has achieved eminently satisfactory sales results, a strong profit record and a number of national awards for the excellence of its packages and displays. Two factors should be kept in mind in considering this statement, however. First, the company is in a high style field where frequent package changes are in order. Second, the nature of its field permits the company to use elaborate packages and thus to achieve almost any desired effect.

A number of other companies, particularly those with large staffs, are in a position to conduct fairly extensive tests without going outside of their own immediate organizations. This method offers one advantage in that it tends to keep the coming package change a comparative secret from competitors. Some large organizations call upon individual employees for comment. Others have found it undesirable to let the employee know that he is participating in any test, since the individual's viewpoint tends to become distorted the moment he or she is called upon to deliver an expert opinion. Individual employees who might prefer a less tasteful design in the field, tend to modify their actual preferences in an effort to demonstrate to the employer conducting the test their good taste or their knowledge of merchandising. For this reason some companies utilize more subtle methods of determining employee reactions. The opportunity to purchase holiday packages at a discount is sometimes used as a means of measuring general consumer preferences.

Testing by Consultation is, of course, a hit and miss method. Its principal function is to secure a relatively high degree of approval among those who will have to sell the package and the product within it. In one sense, it is not testing at all, but merely ascertaining in advance that everybody on the selling team thinks that the new container stands a pretty good chance and that everybody is therefore sufficiently enthusiastic to go out and push the sale of the product. When, however, such testing extends to the interviewing of substantial numbers of "typical consumers" (even though these may be merely plant employees or others available at low cost), testing by consultation begins to merge with field testing and thus begins to achieve a measure of the consumer's actual likes and dislikes rather than of the merchandising staff's understanding of what these likes and dislikes are probably going to be.

Testing by Formula has been more extensively carried on in recent years than ever before. At least two design organizations have promulgated extensive theories of testing. One formula, based on the use of photography, seeks to measure a series of qualitative factors including visibility, legibility, integrity, continuity, individuality, identity, utility, salesmanship, sponsorship, instruction, association, customer convenience and re-usability. Each of these qualitative factors is measured by a photographic method which seeks to evaluate its appearance at varying distances, its appearance when seen both in and out of focus, the value of its color and its appearance in relation to competitive background. The sum of all these aspects is totalled to determine a percentage of design efficiency. Results of an unusually high degree of accuracy are claimed by the sponsors of this theory, but the theory itself has not achieved wide sponsorship or utilization. While it may offer a uniquely effective method of measurement and comparison, it has not yet been proved satisfactory to the vast majority of package designers and must therefore be considered as still in the experimental stage as far as the majority of designers are concerned.

Another system of pretesting is utilized by the designing firm of de Vaulchier, Blow & Wilmet, Inc. This system consists of an analysis which, it is claimed, is based on organized knowledge of the motives which create a desire to own and to buy. Packages are rated against this standardized and organized check list and an index of package value is thus obtained. The system may therefore be applied to existing packages, competitive packages and dummy sketches of proposed designs. It may likewise be utilized to measure the improvements or damage involved when sketches are changed at the behest of a client. The sponsors of this system claim a close correlation between their own results and consumer tests by research organizations.

This system, like the one described previously, is at present being utilized by a single organization only and is therefore—as far as the majority of package designers is concerned—still to be considered as experimental.

Other designers have approached the problem much more conservatively and seek to test only single factors. Thus Alcott, Thoner & Marsh utilized Luckiesh's Legibility Table of Colored Letters on Colored Backgrounds as an aid in determining the visual impacts created by packages. The table values are, however, weighted in accordance with style and size and weight of the lettering being used. This design firm has also devised a Relative Distance Legibility test that is reported to have achieved successful results.

Similar tests seeking to measure single factors are used by a number of designers as preliminary guides to be checked further by field sampling. Field sampling tests are among the most difficult to conduct, yet, at the same time, they provide the most accurate measure of a package. This is true because they measure the ultimate consumer's reaction rather than any theoretical reaction which the consumer should have.

Field sampling tests are of varying types. In essence they consist of placing differing packages under controlled conditions in retail stores and then measuring the sales created by each.

More frequently, however, tests are conducted in the retail store by investigators who question individual consumers. Some years ago, the Beechnut Packing Co. tested 23 proposed cartons by this method. The cartons were broken down into four groups of from four to seven cartons each, since it was felt that no consumer could provide an accurate judgment if confronted with the entire group of 23 cartons.

It will be seen that such a procedure can be followed only where the potential sales of the product are sufficiently large to justify the expenditure of time, money and effort involved.

In a number of instances, manufacturers have limited their consumer tests to single factors and have thus increased the accuracy of the results obtained. One manufacturer, for instance, has conducted a number of tests to determine which of a series of cans appeared largest to the consumer. The can finally selected was a 10-oz. container of flat shape which achieved a far higher score than one of similar capacity, but tall design.

PACKAGING

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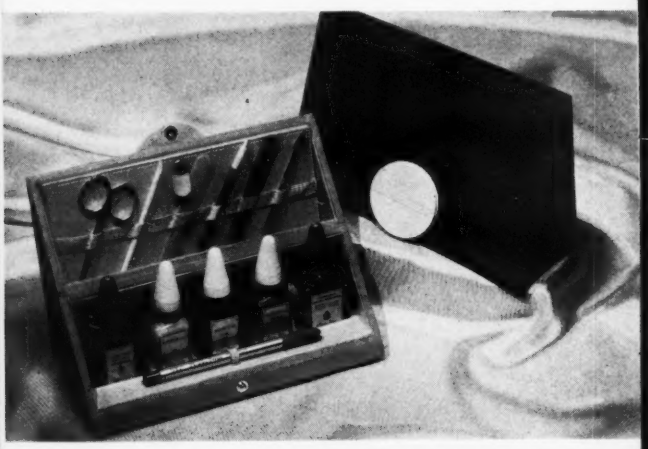

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1 Originally hailed for its refinements in convenience and utility, the Bauer & Black "Cotton Picker" has been further improved by the addition of a sealed transparent cellulose acetate cover stretched over the tuft of cotton at the top of the fibre can. After filling, the package is sterilized in live steam, the cotton remaining sterile, to conform to U.S.P. requirements, until the ultimate consumer removes the cellulose acetate seal. The improved container wears a redesigned label. Package produced by W. C. Ritchie & Co.

2 Following upon the successful promotion of a "Summertime" fragrance and dusting powder, Charles of the Ritz now presents a "Wintertime" set with sport scenes embossed, in gay colors, on a bright blue background. The molded plastic closure on the broad-shouldered bottle matches the label in color. The design theme is reflected on the set-up paper box. Set-up box by Jay-Frank, Inc. Dusting powder box by E. N. Rowell Co. Label by George Craven. Bottle by Swindell Bros. Closure by Armstrong Cork Co.

3 The carrier package originally developed for soft drinks has been logically adopted by the General Electric Co. for its household assortment spare lamp container. Lamps of wattages from 25 to 100 hang suspended from the upper walls of the container. Side walls are photographically decorated with a design suited to mass display. The unit is of one-piece construction. Produced by The Ohio Boxboard Co.

4 First fruits of a complete re-packaging program developed by the Michigan Tool Co. after a study of shipping and storing conditions are these cutter packages. Spirally wound fibre cans with tin tops and bottoms and special oil-proof side walls are used to provide maximum shock resistance. Lids

PAGEANT

telescope deeply to permit easy removal while still providing substantial anti-rust protection. Standardized gummed two-color labels are applied to all containers, sealing openings to disclose any tampering. The central package is all metal for use on tools requiring periodic return for re-sharpening. Fibre cans by Aetna Paper Products Co.

5 An innovation in cosmetic labeling makes its appearance on the new Jergens face cream jar carrying a direct color photographic reproduction of three models symbolizing the slogan, "All-purpose for all skin types." The opal jar is topped by a double shell closure.

6 A neat, compact traveling kit is the wedge-shaped "Skytop" recently placed upon the market by Peggy Sage, Inc. Covered in genuine sheepskin with a champagne-colored silky lining, the unit opens to provide admirable display and product accessibility.

7 The ordinary corrugated case used for mechanical products is seldom a thing of beauty. To introduce its new "Lifetime" mufflers, Goerlich's, Inc. felt that sound design could be achieved, at no extra cost, and would secure increased consumer attention and acceptance for the product. A light blue outer liner is utilized printed in dark blue and yellow, with end labels planned to fit into the design scheme and printed in the same colors. Designer, John Link. Container by Nivision-Weiskopf Co.

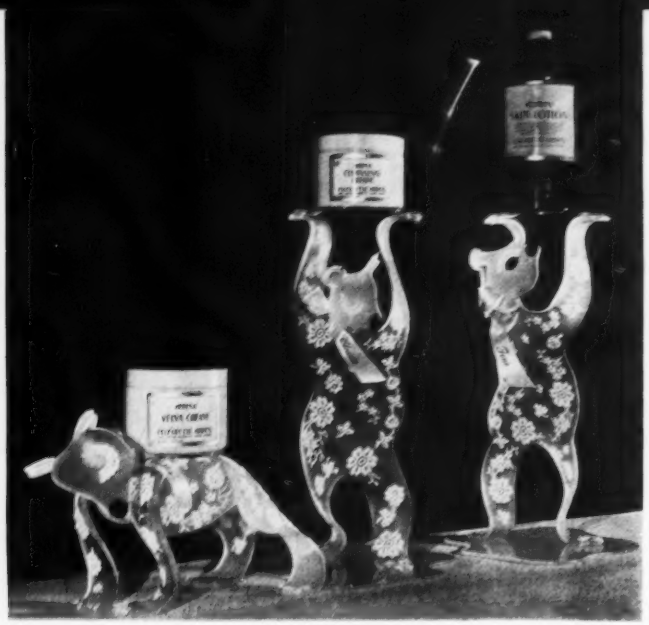
8 The Hunter Packing Co. has shifted its production from the conventional metal can to a new glass container with vacuum seal. The changeover has been achieved without loss of identity as this comparative photograph demonstrates. All the elements essential to the old label have been carried over, in reduced form, on the new wrap-around band. Jar and closure by the Anchor Hocking Glass Corp.

9 S. C. Johnson & Son, Inc. now market paint in glass jars with pry-off lids. Labels feature the slogan "See your color," with a hand pointing toward the exposed portion of the glass through which the consumer can examine the product. Jars are labeled by the applied color lettering process, quarts, pints, half-pints and quarter-pints being utilized. Jar by Owens-Illinois Glass Co. Vacuum seal by White Cap Co.

10 Vari-Line is a rubber type innovation and improvement developed by the Superior Type Co. Designers Barnes & Reinecke found the major packaging problem to be one of instantly demonstrating the "different" nature of the product. Solution: a spot-lighted photograph of the device with descriptive explanatory copy reproduced as if imprinted by the rubber stamp itself. The red, yellow and black color scheme serves to make the package stand out against the colorful competition of the average office supply or stationary store. Box wraps printed by R. J. Kittredge Co.

11 Scientifically designed is Dr. Allen's baby teether—a modernized version of the old-fashioned teething ring. For display and identification, as well as for sanitary storage re-packing in the home, cylindrical transparent packages are utilized, shipped in a carrier display carton. Containers fabricated by W. C. Ritchie & Co. Transparent acetate sheeting by Plastics Division, Monsanto Chemical Co.

12 A set-up box with a six-nested foil-covered base is used to present the six tube set of Schiaparelli bath essence. The tubes stand in a vertical position on display.



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The fifth Plastics Competition

In the fifth annual Modern Plastics Competition, sponsored by Modern Plastics magazine, a number of packages and displays have won top awards and honorable mentions, signifying once again the close and important relationship existing between the packaging and plastic industries.

This year's prize winners are not mere novelties. A number of them represent developments in the use of new materials or new processes which offer distinct possibilities to other packagers for future development and profitable use.

Among the packages, the oil dispenser of Tri-Pak Gun Kit, Inc., achieved a top award in the novelties and miscellaneous category (Fig. 3). Molded of acetate butyrate, the plastic bottle is providing the solution to a problem which had been vexing the manufacturer for the last four years. It replaces glass containers, with a saving in shipping weights and with the elimination of breakage dangers arising from the nature of the product and the manner of its use. Weight is approximately 20 per cent of that of the former container. A saving of 9 per cent in freight costs on shipments from the company's west coast plant to eastern points is reported. It is claimed that in the first three months (April to June 1940) the quantity sold has exceeded the company's total sales of this item for the preceding year. Because of the unique design, such outlets as cigar stores which never before handled this type of merchandise have been opened and new, unsolicited inquiries are arriving from all directions.

The label is also plastic. Printed on .005 gauge clear cellulose acetate sheeting, it is placed inside the container where it not only affords permanence to the lettering, but creates an effect of depth that enhances the overall appearance. The container is molded by the Remler Co., Ltd., and the labels are made by the Dobeckmun

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Co. Acetate butyrate molding material manufactured by the Tennessee Eastman Corp.

Honorable mention goes to a sleek, modern and compact case for holding a group of manicure accessories, sponsored by Northam Warren Corp. (Fig. 9). Molded of fade-proof, blue urea plastics and designed by William Longyear, the case provides an enduring and attractive container that is both compact and practical. Molding material by Plaskon Co., Inc. Molded by Norton Laboratories.

Honorable mention likewise went to a group of molded transparent cosmetic containers designed by Thomas Platt for New York's Saks Fifth Avenue department store (Fig. 4). The set consists of a powder box, rouge box, lipstick cover, mascara box and lipstick brush, the packages being filled in the store as they are sold.

An acrylic material has been utilized because of its lightness, its clarity and brilliance. Acrylic molding resin by Röhm & Haas Co., Inc. Molded by Thomas Mason Co., Inc.

A set of containers, known as a powder blending stand and used by Charles of the Ritz for mixing powder to blend to individual needs, (*Continued on page 104*)

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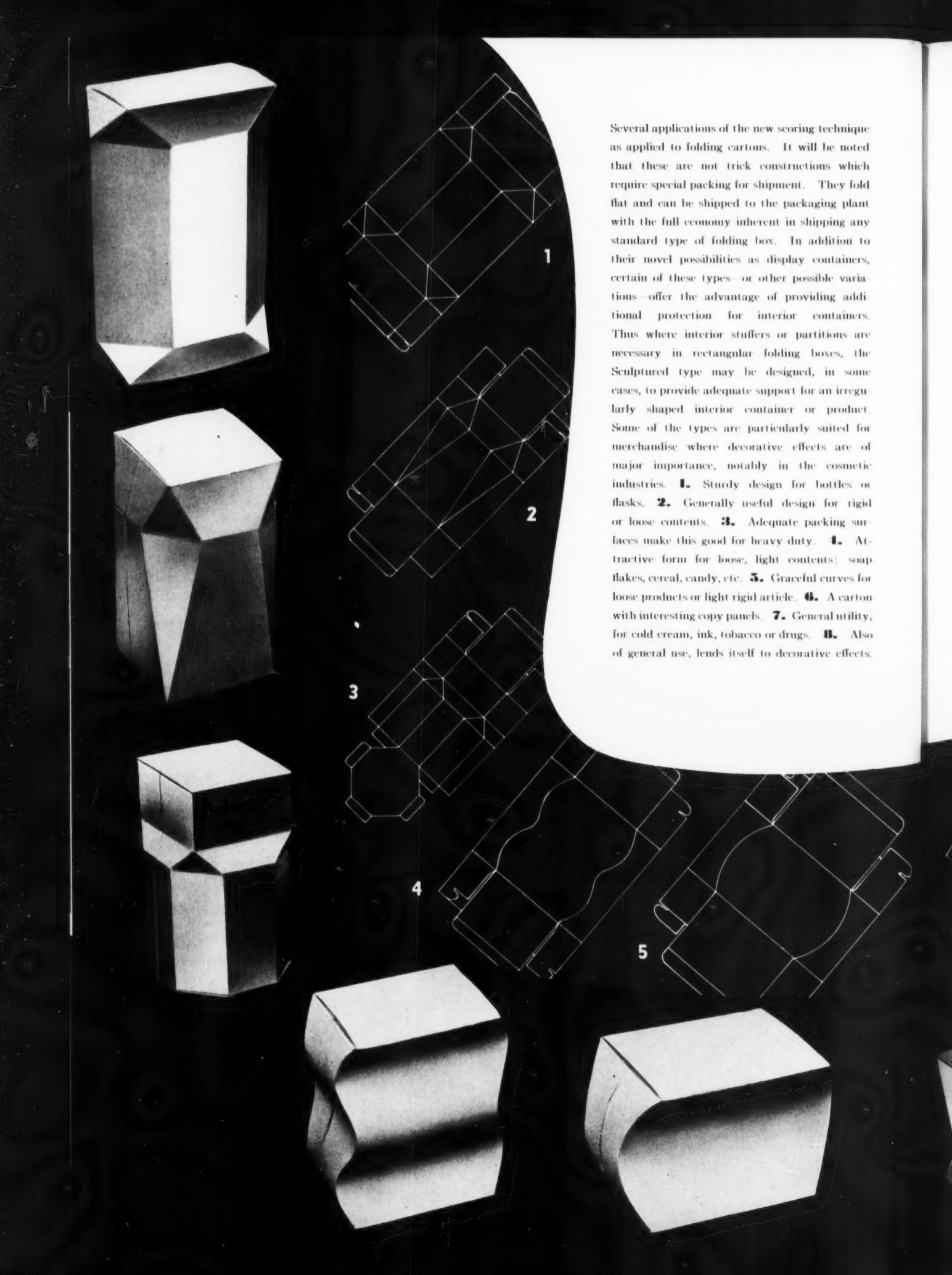


Several applications of the new scoring technique as applied to folding cartons. It will be noted that these are not trick constructions which require special packing for shipment. They fold flat and can be shipped to the packaging plant with the full economy inherent in shipping any standard type of folding box. In addition to their novel possibilities as display containers, certain of these types—or other possible variations—offer the advantage of providing additional protection for interior containers. Thus where interior stuffers or partitions are necessary in rectangular folding boxes, the Sculptured type may be designed, in some cases, to provide adequate support for an irregularly shaped interior container or product. Some of the types are particularly suited for merchandise where decorative effects are of major importance, notably in the cosmetic industries. **1.** Sturdy design for bottles or flasks. **2.** Generally useful design for rigid or loose contents. **3.** Adequate packing surfaces make this good for heavy duty. **4.** Attractive form for loose, light contents: soap flakes, cereal, candy, etc. **5.** Graceful curves for loose products or light rigid article. **6.** A carton with interesting copy panels. **7.** General utility, for cold cream, ink, tobacco or drugs. **8.** Also of general use, lends itself to decorative effects.

Sculptured folding boxes

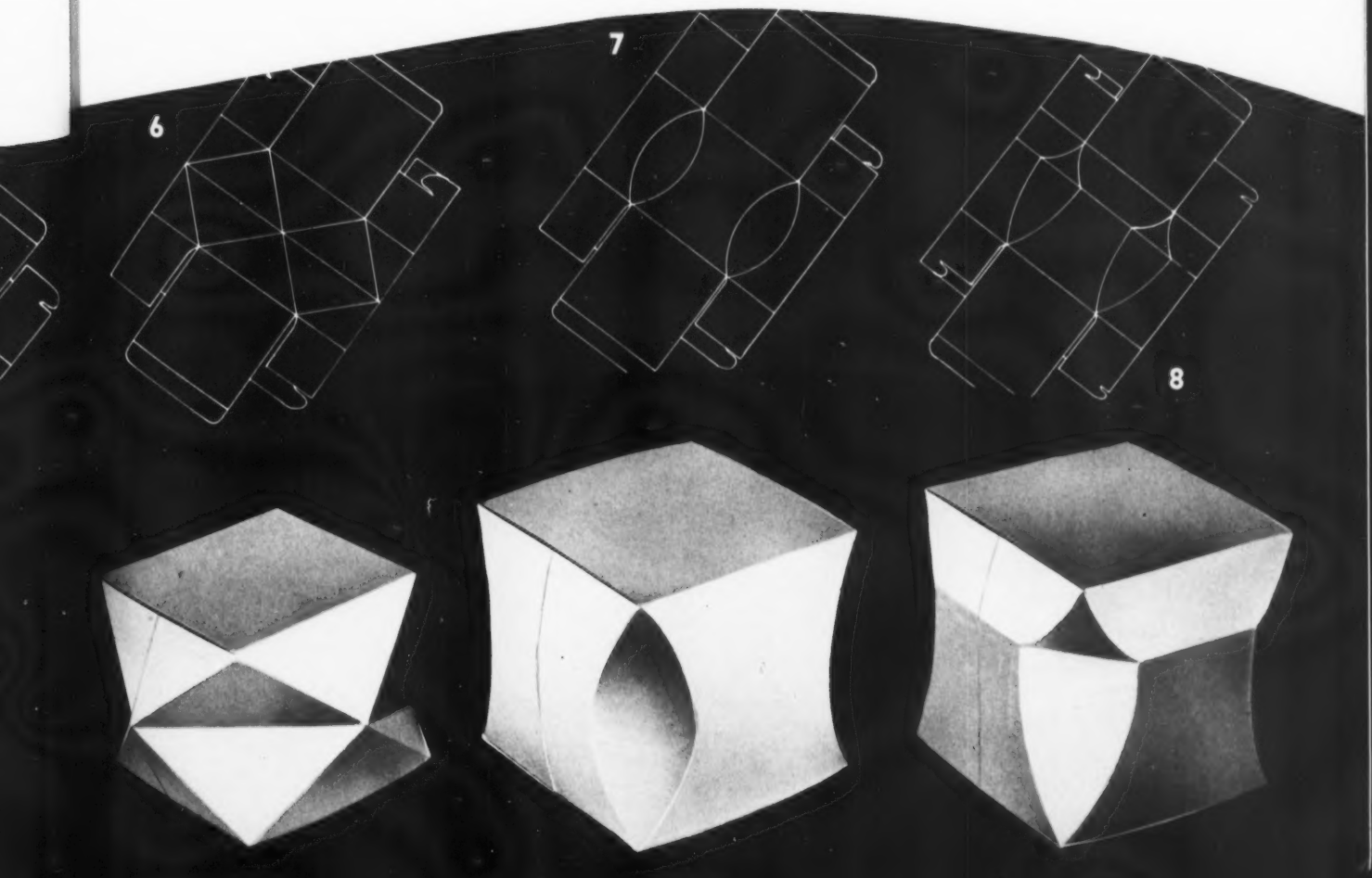
by RICHARD EATON PAIGE

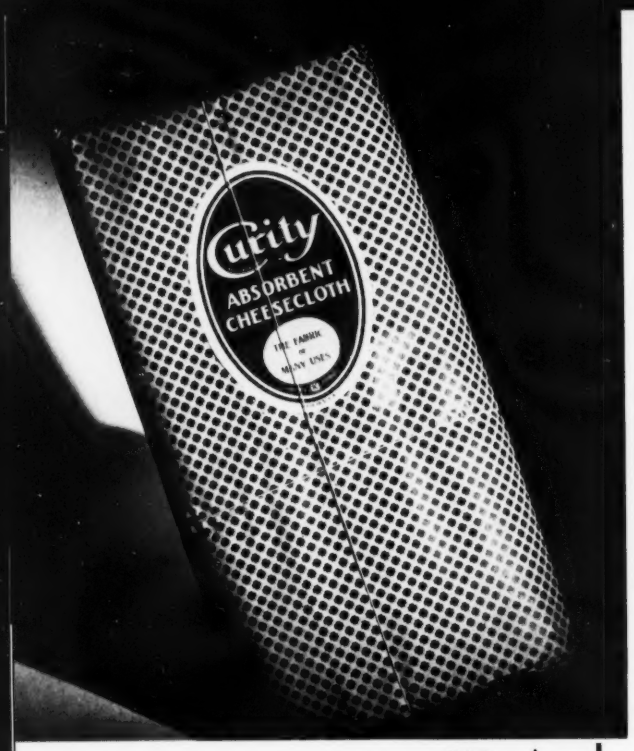
The development of Compensated Scoring opens a new field of design

DO you remember how Walt Disney's early Mickey Mouse cartoons delighted you? They were just black and white productions, but you loved them. True, they were superior to the other cartoon movies of the day, but they were mighty mediocre entertainment by today's standard. Had Mr. Disney himself told you that the picture you just enjoyed so much was going to seem mediocre in your own estimation a few short years later, you would have resented the implication that you didn't have enough good judgment to know something good when you saw it. Yet today, having enjoyed the magnificent color, the full length stories, instead of a mere series of gags, and the life-like animation, we realize that Mr. Disney has given us a new yardstick by which to measure our entertainment.

Just about the time that Mickey Mouse was changing our standards of movie quality, the field of cardboard advertising displays was given buyers of displays a new standard of design and economy by their introduction of the new mathematical principles which enabled them to form elaborate new display constructions easily and practically. These fabricators of the heavier calipers of cardboard had, until then, based their entire industry on the folding of straight lines and the limited variety of simple cut-outs of which that method is capable. Today the display buyer has a new yardstick by which to measure the lithographer's ingenuity; he knows he can ask for anything from a round globe to a baroque scroll and that the result will be both practical and inexpensive.

The folding box industry has been confined to regular, straight-line folding in all its branches. Using those methods, many ingenious display cartons have been devised, it is true, but the folding box itself, representing the bulk of the carton (*Continued on page 100*)





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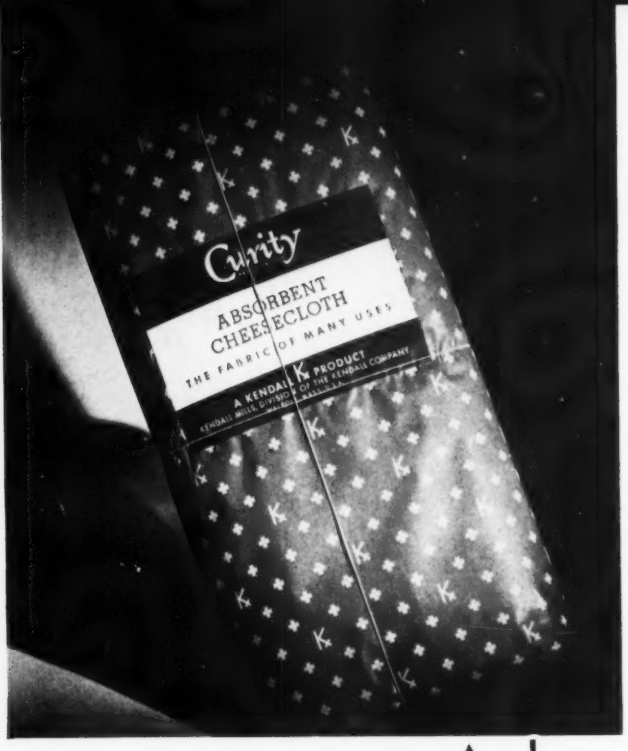

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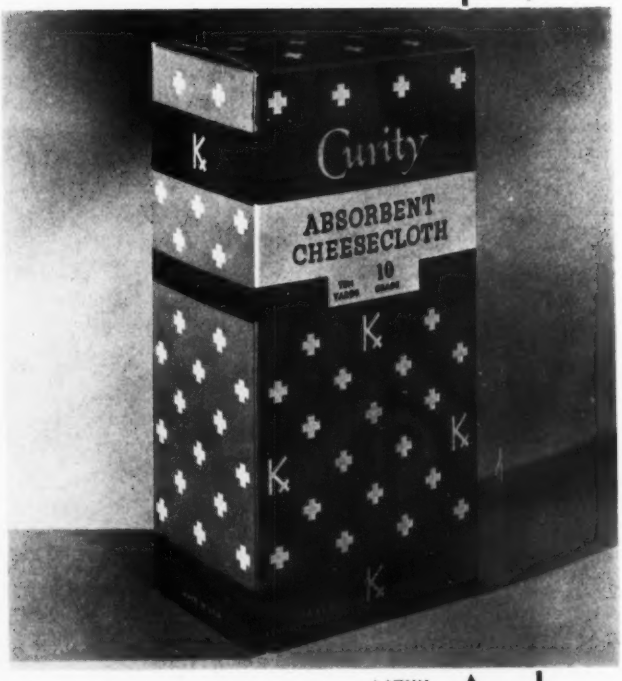

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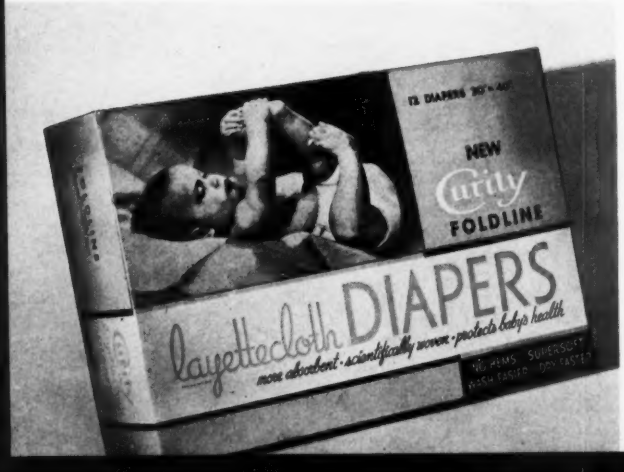


Seventeen years is long enough

Kendall Mills redesigns its packages unchanged since 1923

For the first 20 years since it was organized, Kendall Mills, Division of the Kendall Co., marketed its products in ordinary wrapping paper packages. In 1923, a series of packages was created, based upon a standardized background pattern and label design. These designs were, for their time, effective and attractive, but changes in merchandising practice and in the competitive situation and in the company's lines finally necessitated revision and some time ago, designer Ruth Gerth was retained to re-style the packages and to iron out inequities which had grown into the line through the passage of time.

As is usual in such cases, a demarcation point had to be established between those elements of design which should be retained (if only in modified form) because they had exercised an influence on buying habits over a period of years and those elements which should be discarded and replaced because they had ceased to have a logical function which they could effectively perform.

Since all three of the company's lines—hospital, nursery and drygoods—had sanitary applications, the old packages utilized a cross as an allover design on both cartons and wraps. As used on the old packages, however, this cross was spaced in such a manner as to create the visual impression of a mere criss-cross pattern. On the new containers and wraps, this element has been more widely spaced so that the nature of the individual unit of design may be instantly appreciated.

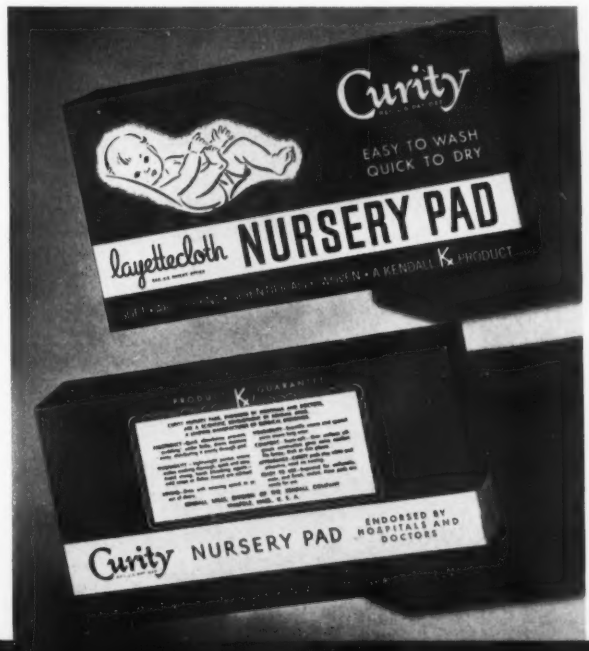
The initial letter of the company's name had been used in the past as a trade mark, but in such a manner as to lack distinctive character and hence recognition value. Miss Gerth modified the letter so that it resembles the familiar prescription "R." In this highly individualized form, it now appears more prominently than ever before. The logotype formerly appeared in a number of variant forms with the trade mark merely placed nearby. On the new packages, a logotype form has been standardized and the trade mark "K" worked in as part of the design.

Royal blue, as the basic color, has been used to tie the three lines together. For both dealer and consumer convenience, differing secondary colors have been used to designate the nursery line which utilizes pink, whereas the other two lines use turquoise.

In order to cut printing costs on the wrapping paper, which is used on the bulk lines, a turquoise colored paper has been adopted, surprinted by the intaglio process, with the cross design in white ink. All wrapped packages then have a royal blue label attached which gives the effect of a two-color job.

One interesting departure from general trends is found in the nursery packages. These were created some time later than 1923 and utilized photographic illustrations. Reproduction difficulties reduced the value of these illustrations somewhat below their theoretical potential and the new designs, therefore, revert to the use of line drawings in a manner which proves more attractive and, at the same time, facilitates production of cartons at high speed.

Credit: Cartons by Worcester Paper Box Corp. Paper by Racquette River Paper Co. Labels by Dennison Manufacturing Co.



Frankly frivolous is Bourjois

but there is an underlying sense of sound merchandising behind these gift packages

There is a tradition in the garment trades regarding the relationship between styles and wars. It seems—so the tradition maintains—that fashion turns toward the extreme prior to and immediately after the beginning of a major war, whereas after war simplicity becomes the order of the day. We cannot vouch for the accuracy of this viewpoint, but if it is true—get your gun, Johnny, because judging by the recent New York fashion openings, this country should be in the war before Christmas.

Be that as it may, cosmetic styles are showing marked signs of the same tendency toward frivolousness, elaboration and luxury. Whatever this may indicate to political astrologers, one thing is certain, it spells potential profits to the cosmetic manufacturers.

In any such bandwagon rush to get aboard the coming style, there will always be some manufacturers who go off the deep end, who overplay their hand and achieve ugliness where they sought elaboration. Such, however, is not the case with Bourjois, Inc. Its newly announced 1940 gift sets are definitely high-style items, they definitely follow the fanciful, frivolous trend, yet, in doing so, they achieve a beauty of line and decoration which will undoubtedly endear them to thousands of lucky gift recipients when the holiday season rolls around.

Outstanding of all the items in the series is a festive boudoir case of drawer type construction, surmounted by a hat rest in the form of an attractive female head resting on a gloved hand. This little statuette, designed by Lester Gaba, is topped by a sophisticated evening headdress created by the famed milliner, John-Frederics. The head is molded of a rubber compound. The case drawer is satin lined and con-

tains an assortment of perfume, rouge, lipstick, talc and face powder packages together with a perfume atomizer, the whole being designed to retail in a $35.00 price range. In use, the set is designed as a permanent dressing table fixture with the thought that the head will serve as a suitable resting place for milady's hat.

Other packages in the line likewise boast a degree of boudoir utility. Thus an attractive glove box with hinged lift lid fitted with an evening chiffon handkerchief and jewelled earrings and matching dress clip, holds, in a satin tray, perfume, face powder, rouge, lipstick, talcum and a nest of three sacheted pillows.

A similar case of smaller proportions is designed for reuse as a handkerchief case. The hinged cover swings upward to disclose perfume, face powder and atomizer.

A large oval-shaped lingerie case is decorated with a removable jewelled hair ornament and carries seven items of the line nestled in a sea of satin.

Lowest priced item in the line, but nonetheless decorative, is a beribboned hat box with a transparent lid which reveals the face powder, rouge and lipstick resting on a satin-lined platform.

It should be noted that wherever costume jewelry or wearable accessories are utilized, they have been worked into the decorative design to form an integral part of the ensemble. Thus the lingerie case hair ornament appears at the exactly proper position on an illustration of a woman's head which fills the central panel of the oval case.

Credit: Set-up boxes by The Lorscheider-Schang Co., Inc. Acetate hood for "hat" box by Hygienol Co., Inc. Ribbons by Century Ribbon Mills, Inc. Wraps by the Addison Lithographing Co. Head of "hat" rest box by Jan Norris Studios, Inc.

On the opposite page may be seen the boudoir case which is surmounted by a hat rest. The satin-lined drawer contains an assortment of cosmetic items. **1.** This glove box is fitted with wearable accessories and holds, in a satin tray, a number of Mais Oui cosmetics. **2.** Designed for reuse as a handkerchief case, this attractive container is equipped with a hinged lid. **3.** A removable jewelled hair ornament decorates this oval-shaped lingerie case which carries seven cosmetic items. **4.** The transparent lid on this miniature hat box quickly reveals the selection of toiletry items packaged within.

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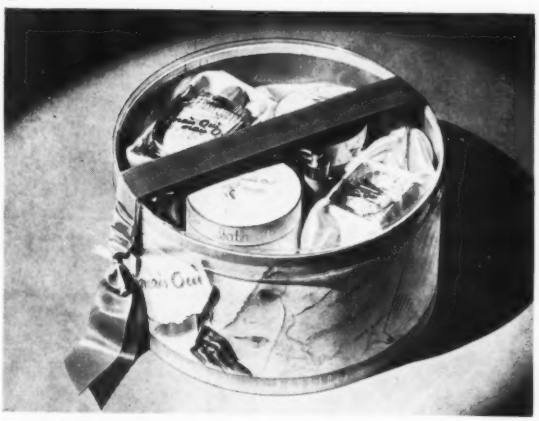
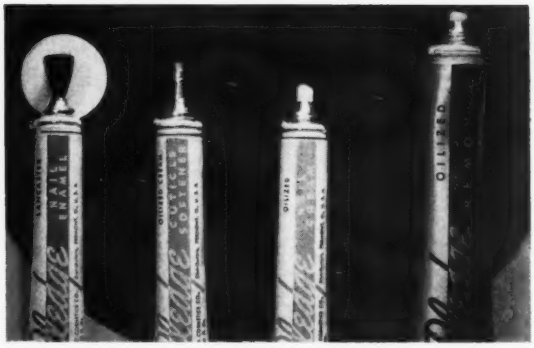


Tubes with a future

Brushes and applicators are integral parts of the new packages adopted by The Ohio Cosmetics Co.



The collapsible tube field—of all the divisions of packaging—shows the least tendency to change from year to year. Innovations in this field are not common to anything like the degree with which they occur among other types of containers, but when collapsible tubes are improved, these improvements are usually of a basic nature, opening up wide new fields of application. This was true, for instance, in the development, in recent years, of the single service tube which today accounts for a very substantial portion of all tube production and which has extended the use of tubes to both liquid and powdered products for which they formerly could not have been considered.

Another such innovation has now made its appearance in the form of brush-tipped self-feeding tubes which have been adopted by The Ohio Cosmetics Co. for a new brand of nail enamel and polish accessories.

The company desired to introduce a 20-cent nail enamel to the market. Traditionally, bottles have been utilized for such purposes and competing products—without a single significant exception—were found to be so packed. A number of these sold in the 10-cent range variety stores and the company therefore sought to avoid, in advance, a straight-out competitive battle between similar types of packages in which it would operate at a distinct price disadvantage. For this reason, an extensive search was begun for a completely new type of package, preferably for which could be claimed distinct use advantages as against other available products.

The idea itself was simple. It was proposed to set a brush or felt applicator into the head of the collapsible tube and to feed the product directly to the brush through the tube nozzle. A number of difficulties had, however, to be overcome, notably the tendency to leakage at the tube head and the problem of eliminating sticking of the cap to the tube. Both problems were solved by designing a washer which is set upon the tube shoulder and which, in repeated tests, has eliminated both sticking and leakage.

The containers, as now developed, offer a number of advantages. They cannot tip or spill. The product will not evaporate. They are handy to use. Each is complete in itself and requires no accessory applicators. They are light in weight and hence substantially reduce shipping costs. They are easily carded and their novel appearance, in comparison with the rest of the field, is certain to attract consumer attention.

Credit: Package designed by The Ohio Cosmetics Co. in collaboration with Appli-Tube Co. (holder of patents) and A. H. Wirz, Inc. Closures by Victor Metal Products Corp. Display cards produced by Radmar Press.

INTRODUCING

A New Department

IN MODERN PACKAGING

The increased tempo of retail trade and the development of a host of new materials and processes has stimulated the introduction of new products and the redesign of old product packages. To better serve its readers' interests, under these conditions, Modern Packaging now introduces a new department—Design Histories—which will hereafter appear on these pages each month.

Some of the packages here featured may represent most important developments. Others may never set records. But all will be examples of the intelligent application of design to the solution of packaging problems and the intelligent utilization of materials and methods in the fabrication of more attractive and more useful packages. Each history will be presented in compact, concise form, bringing the reader the essential details, and only the essential details, of the problem and its solution.

Designers, packagers and package producers are invited to submit material for editorial consideration for this department. It will be appreciated if the data provided follows along the lines laid down in this, the first installment of Design Histories.

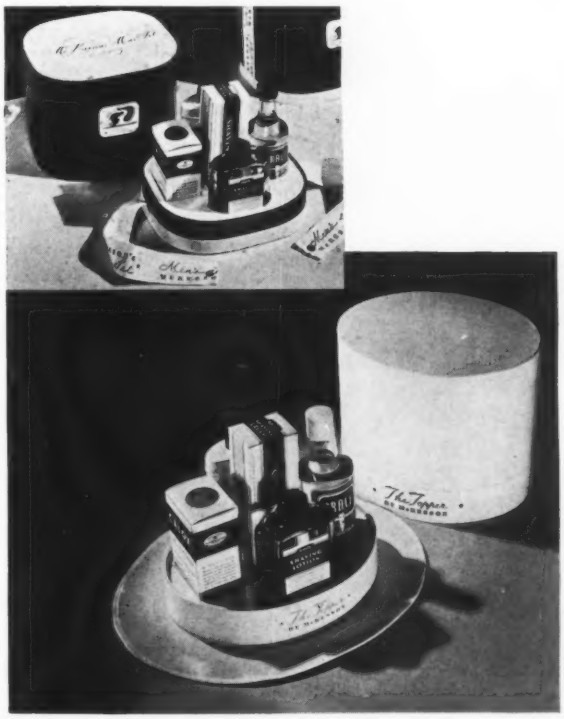
DESIGN HISTORIES

HOLIDAY PACKAGE MODIFIED FOR SECOND SEASON USAGE

Readers of Modern Packaging will recall McKesson & Robbins, Inc. men's set which last year followed a successful holiday season by winning top award in the set-up paper box division of the All-America Package Competition.

The company desired to continue to exploit the basic features of this package—i.e., the vertical display of the products and the display value of the gift container itself—but it desired to do so while still attaining the novelty value of a completely new container. Since the product is a men's set, the new package simulates a top hat and thus utilizes the same basic construction formerly used to achieve an utterly different silhouette. The packages are being produced in three colors, red, white and green, in the expectation that dealers will combine assortments of "Toppers" in mass display to achieve Christmas atmosphere.

Credit: Box manufactured by Douglas Young, Inc.



MISS SCARLETT O'HARA NOW PLAYS A NEW ROLE

To capitalize upon the "Gone With The Wind" vogue, Pinaud, Inc., has marketed this unusually attractive powder box designed to achieve substantial attention value in windows and on counters and for re-use as a dressing table decorative accessory. The figurine, representing Scarlett O'Hara in a costume copied from styles in the period, is molded of acetate plastics. The creation of this item required first the making of hand sculptured models in all their refinements. When the sculpturing was finally completed and approved, the molds were constructed by casting from the original plaster models.

Problems of coring this mold to reduce weight necessary for economical production, the automatic handling of these cores which draw in two different directions, both straight and angular, required some very fine engineering and considerable thought, together with the necessity of precision fit of the figure on the powder box lid to the metal can.

The item produced was successful both from a standpoint of practical molding cost and attractiveness, as indicated by the remarkably fine reception it is reported to have met with in sales.

Credit: Molded by Plastics, Inc. Can by National Can Corp. Acetate molding material by Bakelite Corp.

DESIGN HISTORIES

STAGE SETTING FOR AN UNUSUAL PRODUCT

Heirloom Needlework Guild, Inc., has marketed a large assortment of needlepoint outfits consisting of partially completed needlepoint designs with the materials and tools necessary to permit the purchaser to complete the pattern. For this purpose, it utilized a series of simple, full telescoping set-up boxes with transparent acetate windows designed to show the central portion of the pattern. The tan box cover paper, however, was found to be insufficiently attractive when placed on display. The entire series of packages has now been redesigned for greater eye appeal. The boxes have been deepened so that contents and stock numbers are now placed on the sides as well as on the top of the container, thus permitting identification from store stock shelves. The new design combines maroon and white to provide a contrasting frame enhancing the appearance of the needlework. The design problem was more difficult because of the wide range of box sizes involved. The scroll work pattern has solved this problem.

Credit: Boxes by Brick & Ballerstein. Transparent acetate sheeting by Celluloid Corp.

PLAY KIT SUCCESSFULLY TAPS DEPARTMENT STORE MARKET

Barr Rubber Products Co. manufactures a wide range of inexpensive rubber toys, distributed through several types of retail outlets, but until recently considered definitely not of the type to be distributed through department stores. Reasoning that the price of any given product in this line was too low to be attractive, the company grouped a half dozen toys into a "play kit." A special package was designed, made of corrugated board and simulating airplane luggage, complete with linen weave all-over pattern, stripes in contrasting colors and a carrying handle. Just two words, "Play Kit" appear on the outside of the box. Opened, one side folds back to become a display panel carrying a brief sales message.

In merchandising the play kit, stores point out the usefulness of the package itself as an integral part of the purchased value. It can be used as a carry-all, to carry books to school, lunch to the hiking trip, or swimming suit to the beach. Appealing to mothers and dads will be the thought that here is a convenient place to keep the toys off the floor and out of the way.

Credit: Package designed and manufactured by The Hinde & Dauch Paper Co.

DESIGN HISTORIES

HOSE PACKAGING AS DONE AT NEW YORK'S BLOOMINGDALE'S

Stocking boxes originated as protective storage containers. They were designed to be stacked one on top of the other on the retailer's shelves and hence they have been usually either left undecorated or decorated in a more or less casual manner.

Convinced of the possibility of achieving something more than mere storageability for hosiery boxes, Bloomingdale Bros., Inc., New York department store, commissioned designer Erik Nitsche to prepare a series of five boxes utilizing photography in connection with the design. The box tops are of an illustrative nature, implying the type of merchandise rather than displaying it. The script "B" trade mark of Bloomingdale's has been featured in three instances. Two others emphasize sheerness and stocking length. Side wall wraps are of a different color in each instance to facilitate sales clerk identification when the boxes are stacked on retailers' shelves

All five of the containers are admirably suited for travel outside of the store, something which cannot be said of the average hosiery box. Their photographic design is sufficiently attractive for use by the gift giver. They feature the Bloomingdale trade mark or the sales points of the product in a prominent yet unobjectionable manner and they thus serve to remind the recipient of the source of the stockings and of the logical place for re-purchase.

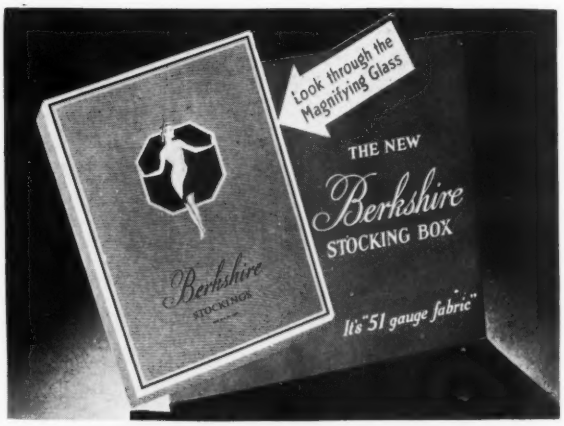
Credit: Box wraps by Brooks & Porter, Inc.

THE PRODUCT SUPPLIED THE PACKAGE DESIGN THEME

Designer Arthur S. Allen found, in the color and texture of Berkshire stockings, the theme for the pattern utilized on the Berkshire Knitting Mills new boxes. The company first capitalized upon this fact to secure consumer concentration upon the texture and the fine fabrication of its product by reproducing the box on a display card equipped with a small magnifying glass. The consumer is invited to examine the box under the magnifying glass to see a reproduction of the 51 gauge fabric. The act of examination, it is hoped, will firmly fix, in the consumer's mind, an impression as to the fineness and quality of the Berkshire product.

The designer has retained a modernized version of the original Coles Philips "Berkshire girl" which has been in use by the company since 1925 and has appeared on literally millions of boxes.

Credit: Display card produced by the Display Advertising Co. Magnifying glass by Penn Optical Co.



DESIGN HISTORIES

REACHING BOTH THE FEMININE AND MASCULINE MARKETS

L'Orle Parfums Co. neatly suggests "Gifts for Her" and "Gifts for Him" with a series of attractive eau de toilette porcelain flacons. In the family there is a presentation of six bud vases, each design a replica of a museum piece, executed in six pastel colors. After the eau de toilette has been used, the containers may be used as decorative flower vases for table or dresser. The Cameo series are designed for the feminine market. In this line, there are four flacons, each with a cameo design on its front face and each available in a soft pastel tone. The closures are made of glass and a ribbon decorates the neck of each flacon. Set-up paper boxes hold each of the containers, the color scheme of the box complementing that of the flacon. The Sport series is for the men. Design elements calculated to appeal to men are found in this line. The container shape is in the form of a horse shoe and front panel design depicts a polo player in action. Closures are in the form of a wooden ball and the necks of the containers are decorated with manila cord. Four color selections are available with suitably designed companion set-up boxes.

Each of the containers in the new L'Orle family have several similar features—most noteworthy being usability of the containers after the eau de toilette has been used, since the company name is found only on the bottom of the containers. Soft colors to harmonize with dressing table or bathroom accessories are likewise a common element found in all the new packages.

Credit: Glass closures by Carr-Lowrey Glass Co. Set-up paper boxes by Imperial Paper Box Corp.

GIFT NOTE USED AS KEYNOTE FOR TOILETRY PACKAGE DESIGNS

The sentimental note which is customarily enclosed with a gift provides the keynote for the design motif of the new toiletry packages which designer Harry Darling has created for the Allen B. Wrisley Distributing Co. The line—known as Scentiments—ingeniously utilizes the note theme for each of the packages in the various gift sets. Thus labels take the form of a small envelope and note, the latter bearing the product and company name. The die-cut bottle labels are executed in pink, edged in gold and imprinted in maroon. The set-up box is simple in design, pink being the color utilized, the label duplicating the trim used on the bottle labels. Bars of soap are cartoned and overwrapped with a pink sleeve designed to simulate a sealed envelope. The base of the hinged set-up box is ingeniously constructed to provide proper counter display. Individual compartments hold the various portions of the set—soap alone or soap and cologne or soap, bath salts and bath powder—in individual compartments which are gold lined or gold edged.

Special mention, perhaps, might well be given the dusting powder container. A round fibre base is utilized, covered with pink paper and edged with gold. The lid is of brass with transparent acetate window.

Since the identifying label is found on the bottom of this container, the package might well be used as a permanent dressing table accessory after the original contents have been used. Another interesting feature of this novel line is the use of a brass closure on the cologne bottles and a large wooden closure on the bath salts bottles.

Credit: Bottles by Carr-Lowrey Glass Co. Brass closures by Chase Brass & Copper Co., Inc. Labels by A. J. Anderson.

DESIGN HISTORIES

ONCE A NOVELTY—NOW A NECESSITY

In this country more than anywhere else in the world, the competition is keen and we have thousands of products crammed together on shelves and counters or in display windows of stores. Saul Stein Associates, stylists and merchandisers for a number of cookie, cake and candy manufacturers, has, for some time, firmly believed that the package is one of the most vital factors in maintaining sales volume and in competing successfully with other brands.

This organization has styled a number of tin containers for Alice Dodd cookies, cakes and candies, as well as for the Weston Biscuit Co., Altman's and Macy's department stores, each container planned to sell itself. Bright color combinations are utilized. The lid of each can is well decorated. Pictorial designs are favored, particularly designs which incorporate American themes. Thus one box lid bears a lithograph of the Old Curiosity Shop, immortalized by Charles Dickens. Another drum takes note of fashion trends and incorporates a scene reminiscent of the Gay Nineties. These containers are distributed through department stores and specialty shops and thus must compete with other packaged goods. The use of well-planned designs, bright color schemes and, in some instances, the deliberate elimination of advertising messages (in order to make the package desirable for direct use on the coffee table) combine to arouse consumer desire for the products.

Credit: Tin containers manufactured by Geo. V. Clark Co.

Left: In use, the jars are claimed to greatly facilitate the proper apportionment of the product, to eliminate all danger of tipping over the container and to provide an extremely attractive appearance on the table. As a further advantage, they fit most conveniently into a crowded refrigerator. Below: A cross-section of the bowl-shaped jar may here be seen.

To be served with a spoon

Anthropologists tell us that many of our everyday practices and customs have lost their basic reasons for existence, but continue in use as survivals of the past simply because of human inertia and the human desire to stick to known things rather than to explore unknown regions.

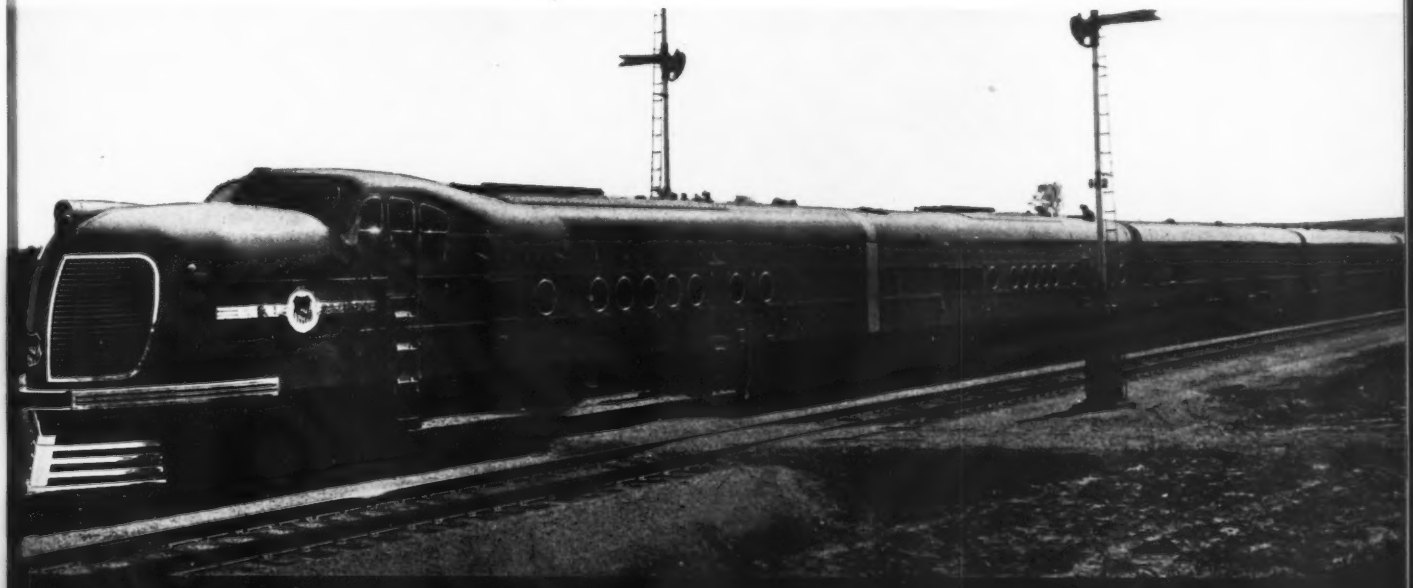
It would seem that this proposition can even be introduced with some logic into an explanation of the everyday catsup bottle. While the tall narrow-necked bottle was undoubtedly desirable for the thin condiments which preceded catsup as we know it today, the present product and its thicker counterpart, chili sauce, presents certain difficulties to the consumer. Whether real or imagined, these difficulties are at least noticeable enough to have called forth periodic comment and to have made the difficulty of getting catsup out of a bottle a fit subject for the professional humorist. No doubt there will be many who will contend that the traditional catsup bottle has many advantages which justify its continuance in use. The P. J. Ritter Co., in any event, has decided to challenge this thesis by the introduction of both catsup and chili sauce in what it terms, "buffet bowl" packages.

The company has been fortified in its opinion by a series of surveys made during the last four years among housewives. Reporting on these surveys, it claims the discovery of a definite preference for a wide-mouthed, low center of gravity jar from which catsup can be ladled with a spoon.

It has, therefore, placed upon the market the new jars of 12-oz. capacity of fish bowl shape with smooth, clear walls and without labels on the glass portion of the container. The jars are topped by six lug, single shell closures decorated in three colors and are marketed in a carrier package formed of a single sheet of board so folded as to nest two 12-oz. containers and to provide a sturdy carrying handle.

Credit: Jars and closures manufactured by Owens-Illinois Glass Co.

HIDEBOUND *or Streamlined?*



Your product may be streamlined for sales. But how about your package? Is it up to the standard of your product?

Burt has achieved an enviable reputation for the creation of salesworthy boxes. Our design staff has a wide background of proved success in the designing of boxes that sell, boxes that stand up and protect products, boxes that are economical to produce. Working in collaboration with our experienced market research department, our designers are constantly producing outstanding packages.

And our *automatic* production facilities are geared to follow through perfectly on the manufacture of the boxes in huge quantities. Central plant location means quick deliveries to key packaging points.

Consult our design engineers on your problem.

F. N. Burt Company, Inc.

500-540 SENECA STREET, BUFFALO, N. Y.

NEW YORK CITY
630 Fifth Avenue
Room 1461

PHILADELPHIA
A. B. Hebeler
P. O. Box 6308
W. Market St. Sta.

NEW ENGLAND
A. B. Bacon
BOSTON
120 Boylston St.
SPRINGFIELD
P. O. Box 214
Highland Station

CHICAGO
Room 2203
919 N. Michigan Ave.

CLEVELAND
W. G. Hazen
P. O. Box 2445
E. Cleveland, Ohio

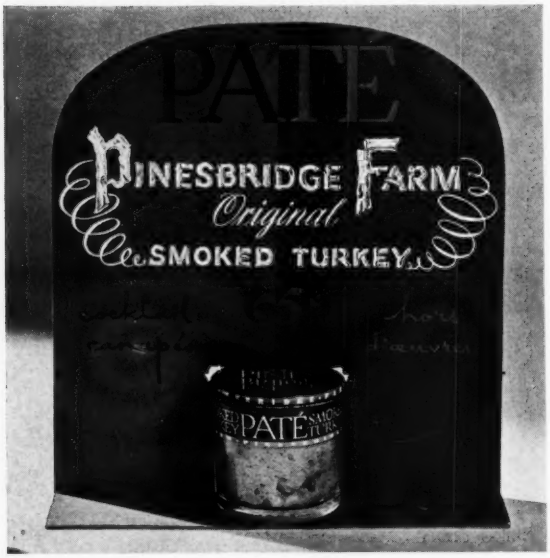
CINCINNATI
221 Walnut Street
Telephone: MAin 0367

MEMPHIS
W. F. Shepherd
268 Madison Avenue

MINNEAPOLIS
J. E. Moor
3329 Dupont Ave. South

LOS ANGELES
Louis Andrews
623 South Grand Ave.

CANADIAN DIVISION
Dominion Paper Box Co., Ltd.
469-483 King Street West
Toronto 2, Canada



YOU RAVED ABOUT SMOKED TURKEY—
NOW YOU'LL APPLAUD THIS NEW FORM!
Smoked Turkey Paté
4 OZ. JAR 64c
3 jars for 1.89 6 jars for 3.74 12 jars for 7.19
Last November we introduced the famous Pinesbridge Farm Smoked Turkeys by the "whole bird." They became immediate successes! Now Macy's is proud to offer this luscious delicacy in the new pate form—nothing added, nothing taken out—with all the succulent charm of the original Pinesbridge Farm Smoked Turkey. Macy's, 8th Floor.
Spare the liquor and spoil the guests with stuffed celery or canapes of smoked turkey pate.
Melt the better half's resistance to your new Fall bonnet with a spoonful of smoked turkey pate

Glass jar scores sales surprise

Everyday grocery items are expected to be packed in containers of standardized form. Unusual items, however, such as the newly introduced smoked turkey paté sponsored by Pinesbridge Farm, would ordinarily be packaged in a container of some unusual substance, shape or design in order to achieve a distinctive appearance and to identify the product as something of a very special nature.

Production consideration which demanded an air-tight package nullified the attempt to secure a container off the beaten path such as a pottery crock or a molded plastic jug or jar and designer Gustav Jensen therefore turned to a standardized jar and cap. He sought, through the use of conventional materials in an unusual manner, to achieve prominent display.

To capitalize upon the Pinesbridge Farm name and upon the consumer approval which already existed for the farm's smoked turkeys, the words "Pinesbridge Farm" were lettered to cover the entire cap top, appearing in white on a bright blue background. A red band with white lettering repeating the same wording appears on the usually difficult-to-decorate edge surfaces of the cap. The red and blue color scheme is carried out in the label as well which identifies the product and carries the necessary informative legend.

A single package display piece, carrying out the same color scheme, was designed of a small size and simple construction to permit its inclusion with each carton of twelve jars shipped to dealers. The package first reached the public through the grocery department of New York's R. H. Macy & Co. department store. Fairly prominent advertising, which did not picture the package, was utilized in the hope of moving a fair proportion of the original stock of 40 doz. jars which were placed on sale on September 3 last. Newspaper advertising was supplemented by display on every counter in the grocery department and these, in combination with the unusual and attractive appearance of the package and the novel nature of the product, brought forth an unexpected consumer purchasing rush. Within two days the original order was depleted and reordered to be followed by another reorder on September 9, bringing the total up to 120 dozen packages moved in little over a week. By September 13 reorder units were upped from 40 to 100 doz. and sales are reported to be continuing at an accelerated rate.

Credit: Package and counter display designed by Gustav Jensen. Jars and single shell closures, Anchor Hocking Glass Corp. Labels, The Foxon Co.

Dainty fingers
PREFER ARTMOLD CAPS

FEMININE FINGERS love the feel of Armstrong's Artmold Caps because they're satin-smooth and trim, easy to remove and to replace securely. It's smart to give your customers this additional reason for purchasing your product.

But touch-appeal is not the only reason that so many modern drug and cosmetic manufacturers are topping their packages with Armstrong's Artmold (molded plastic) Caps. There's a full measure of *eye-appeal* in these stylish closures. They're available in lustrous colors, in smart stock shapes, and in private designs to meet your requirements. Name and trade-mark embossings can be used to add real package distinction.

Furthermore, Armstrong's Artmold Caps provide your product with a safe, sure seal—guard against leakage and evaporation. Send for samples and prices. Armstrong Cork Company, Glass and Closure Division, 916 Arch Street, Lancaster, Pa.

Armstrong's ARTMOLD CAPS

New Tissue Labeling System

The recent revision of Simplified Practice Recommendation R46-39 permitted the manufacturers of tissue paper for wrapping purposes to materially improve their labeling plan so that it now affords greater protection than ever before to the buyers of this type of paper.

Taking advantage of the change which eliminated the old label from the Simplified Practice Recommendation of the United States Department of Commerce, the Tissue Assn. has brought out and copyrighted a new and attractive two-color label.

Manufacturers of wrapping tissue are being licensed to use this label under strict regulations which guarantee that the paper meets the standards set forth in the Simplified Practice Recommendation for tissue paper (SPR46-39). The License Agreement signed by these manufacturers carries with it adequate provisions for testing and furthermore permits of policing the use of the labels as was not previously possible.

When a question as to count, size or quality arises, samples will be submitted to the Tissue Assn. which will, in turn, send them to the Electrical Testing Laboratories of New York City for testing in accordance with the requirements of the Simplified Practice Recommendation. If any cases are found where the paper does not meet the standards of the label on the package, the Tissue Assn. will then take immediate steps to protect the consumer's interest and to discipline the manufacturer who has misused the label. If necessary, for the complete protection of the consumer, the manufacturer's license to use the T. A. label will be immediately revoked and will not be renewed until the Association has received fully satisfactory guarantees that his product will meet all standards in the future.

Deceptive Package Seizures

Actions of the Food and Drug Administration in enforcing the deceptive packaging provision of the Federal Act have shifted recently, to a degree, from the candy and vanilla fields to the macaroni industry. Recent seizures include 19,128 boxes of macaroni; 10,940 boxes of spaghetti; 324 packages of macaroni dinner; 48 packages of spaghetti dinner; 1330 packages of noodle soup mix; 466 packages of egg noodle products; 835 packages of grated cheese; 1669 boxes of candy; 382 boxes of tea bags; 696 bottles (in cartons) of vanilla extract; 239 rolls (in tin boxes) of adhesive plaster and 108 bottles (in boxes) of nose and throat drops.

Packagers, in a number of industries, may be particularly concerned with the trend here indicated. While such seizures are not to be construed as a setting of a new policy or as an extension of the Administration's interpretation of the Act as it applies to deceptive packages, they seem to touch with particular emphasis upon products which, by their very nature, present difficulties in filling operations. Such items as macaroni dinner and spaghetti dinner usually consist of a group of subordinate packages, for various ingredients, placed together into an outer carrier package. Such a combination of products provides, of course, substantial opportunities for deception where the desire to deceive exists. However, the manufacturer whose intentions cannot be questioned might find himself hard put to eliminate all "air pockets" in creating a practical combination of a group of products of this sort. Packagers in many fields where products are grouped for unit sale will therefore be particularly interested in discovering the exact nature of the packages which have been seized and the degree to which such deception, as is alleged to have occurred, has resulted from direct intent to deceive rather than from difficulties inherent in the packaging operations.

In the case of the tea bag seizures, the deception would seem to occur as a result of jumbled dumping of bags into a container. Such dumping is undoubtedly less expensive than the orderly arrangement of bags. Yet orderly arrangement is possible as has been proved by its utilization by a number of manufacturers. The very fact that a portion of the industry applies this procedure would seem to strengthen the Administration's case.

An interesting point which has been raised is whether the same stringency of regulation would apply to tea bags supplied in a container designed for use by the retailer as a counter dispenser. At first glance, it would seem that no claim of consumer deception could here be entertained and that the retailer has means other than visual for judging the quantity he has purchased. Packagers who have been questioned, however, express apprehension on this point as to the Administration's intent. (*Continued on page 108*)

Carding Makes Small Items Sell Themselves

Attaching small items to cards for open display has proved so successful from the sales viewpoint that this method of "automatic salesmanship" is becoming more widespread, every day. An attractive card provides greater attention power than the product alone would have and furnishes instructions and selling arguments that the product itself is too small to carry. The consumer can inspect the product and sell himself without waiting for a salesgirl, who would probably sell it less effectively than the printed message that the prospect reads.

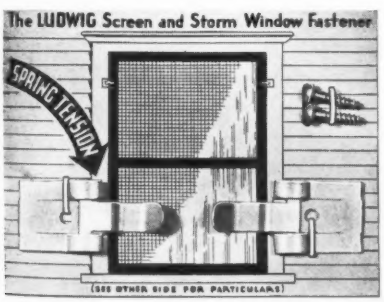
In many cases, related items can be assembled in a single unit of sale without concealing them inside a package. Oftentimes, a card provides a less expensive package than would otherwise be required.

Dispensing display cards, where several similar items are attached to a large counter card from which they can be removed, are a convenience for the dealer, prompting him to purchase and give them prominent display. They are also a convenience for the prospect, attracting his attention and tempting him to buy. Pilferage is discouraged by requiring a certain amount of effort to remove the article.

One reason for the rapid increase in the use of such displays is the speed, safety and economy with which the items can be attached to cards with Bostitch stapling equipment especially adapted to this use.

782 Models—18 Engineers Provide Proper Equipment

The Bostitch staff of 18 research engineers helps adapt the Bostitch principle and one or more of its 782 easy-to-operate machines to unusual fastening problems of all kinds. 300 specializing field representatives make its liberal trade-in and budget plans quickly available everywhere.



Three Bostitch staples fasten these related items securely to their display card. *Sales appeal*—showing the product in illustrative action. *Protection*—pilferage made more difficult, items cannot stray. *Economy*—due to low cost and high speed in production.

"I Chose **BOSTITCH** for Economy and Got **SALES APPEAL** and **PROTECTION**, Too!"

Sales Appeal

Protection

Economy

In the past, you, too, may have chosen a fastening method for its economy. Or you may have picked it for sales appeal or protection against pilferage or rough handling. But now, as many manufacturers are discovering, *you need not sacrifice* one advantage for another. Bostitching gives you all three—economy, sales appeal and protection.

SALES APPEAL—Bostitching is neat, unobtrusive, adaptable to both product and display.

PROTECTION—Bostitching discourages light fingers at the sales counter, resists heavy hands in shipment, won't loosen with moisture.

ECONOMY—Many manufacturers have found that Bostitching (through paper, wood, metal) costs less than glue, tape, thread, tacks, etc.

This FREE Folder Offers More-for-Your-Money Fastening Facts

SEND FOR IT TODAY!

Write for "Bostitch Fastens It Better With Wire" or send samples to be fastened, addressing

BOSTITCH 56 Division Street, East Greenwich, R.I.
or Bostitch-Canada, Ltd., Montreal

Twelve capsules worth a dollar

Norwich high potency vitamin product needed—and got—a package that looked right throughout a long home life

Unusual was the problem which confronted The Norwich Pharmacal Co. when it decided to market a vitamin product in a 12-capsule unit under the trade name One-A-Week. Unusual is the solution, developed by designer Frederic S. Grover, in the form of a plastic container with transparent plastic lid.

The box contains 12 vitamin capsules to be taken one per week. It sells for one dollar. It was therefore necessary that the package be capable of lasting three months in the home. A further essential requirement was that the container suggest the value of the product —a particularly essential point to convey in view of the fact that other vitamin products, of lower per capsule potency, are on the market at prices offering a greater number of capsules (but usually much less than a 12-week supply) per unit of cost.

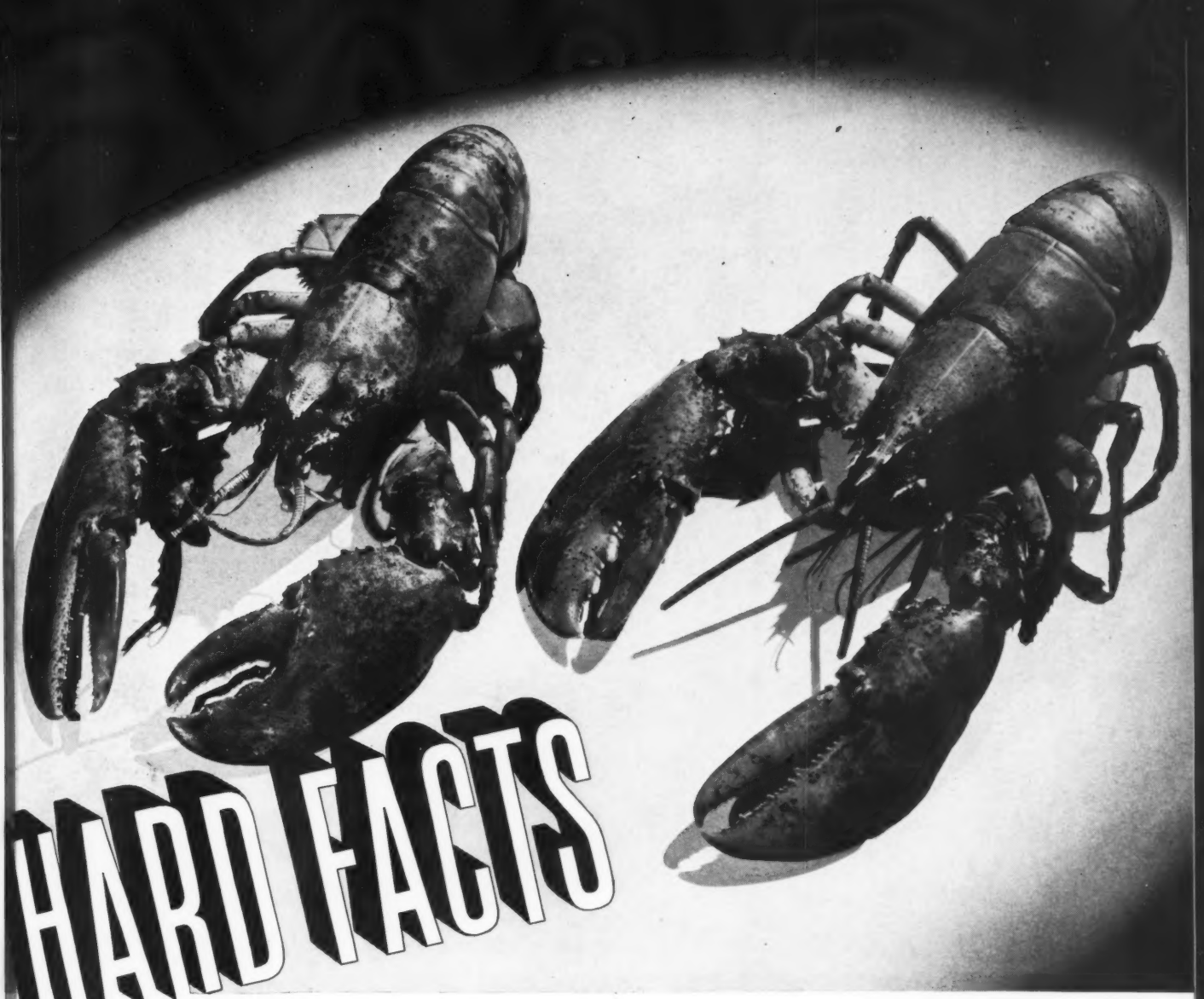
Since only 12 capsules are contained in the box and all appearance of deceptiveness had to be avoided, the designer elected to make the entire top of the container of transparent material. In this way, it became possible to get all of the required labeling information in an easily visible spot and still not destroy the "jewel box" appearance.

The capsules are of a bright orange color—selected by the manufacturer for the purpose of suggesting vitality and increasing taste appeal. These are arranged into molded semicircular depressions, in the phenolic plastic base, in the form of a letter "A" signifying the type of vitamin contained within the capsules. This section occupies approximately one-half of the total area of the base, the other half being filled by an insert platform of black cardboard to which is attached an accordion folded brochure presenting eight pages of descriptive information.

The transparent plastic cover was purposely planned with set backs and a raised strap across the top in order to avoid any tendency toward warpage. Molded into the strap so as to appear immediately above the central portion of the letter "A," formed by the capsules, is the word "Norwich."

Credit: Container molded by American Insulator Corp. Phenolic base material by Durez Plastics & Chemicals, Inc. Acrylic resin transparent cover material by E. I. du Pont de Nemours & Co., Inc. Base compression molded. Cover injection molded.

The lid of the Norwich vitamin capsule container is made of transparent plastic material, permitting the presentation of all necessary labeling information by means of a brochure set into an insert platform. Vitamin capsules are arranged into molded semicircular depressions, in the phenolic plastic base.



HARD FACTS

The private life of the lobster is interesting. But most of us are far more interested in how he tastes when he's on a platter.

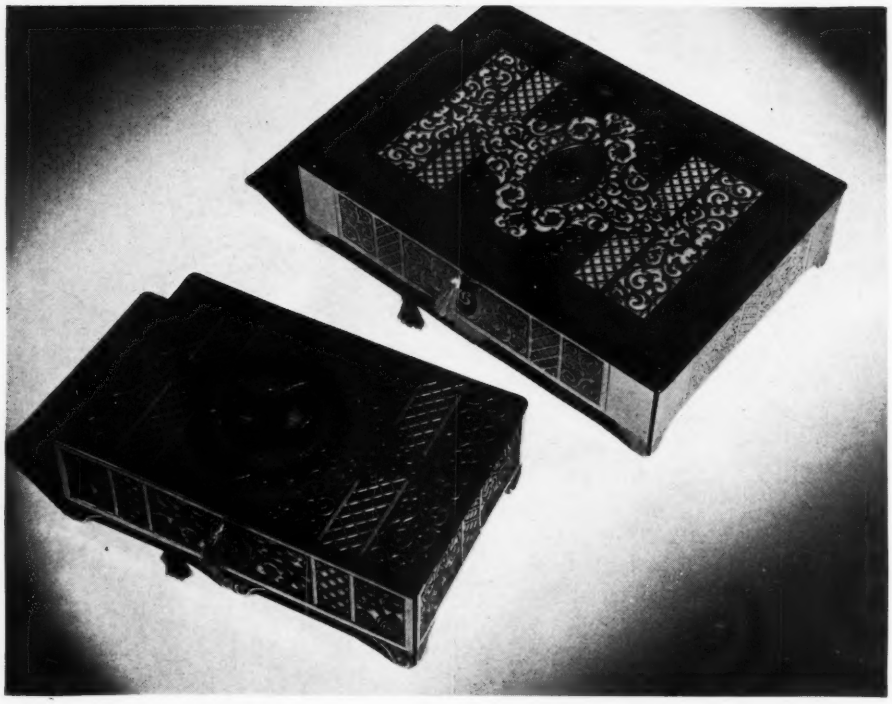
It's very much the same with closures. How they are made is quite important. But how they perform when they're on your product is the thing which really matters to you.

That's why we're so particular here at CROWN, about every lot of closures we ship. Crown Closures are not only made of the finest materials on the most modern precision machines. Unusually rigid inspection makes certain that every lot is of the same high accuracy and uniformity. When you use Crown Closures you can rest assured that, as far as the cap is concerned, there will be no dissatisfaction with your package.

CROWN CORK AND SEAL CO., BALTIMORE, MD.

World's Largest Makers of Closures for Glass Containers

IN THE LONG RUN - CROWN CLOSURES COST-LESS



Deeply embossed foil-covered board of a special formulation is used to achieve this unusual filigree effect. Note that the same design—and the same embossing plates—have been adopted for both containers, although finished appearance is very different.

"Deep embossing" applied to boxes

New set-up box construction method permits attainment of unusual filigree and tooled metal effects

An unusual combination of processes has recently been adopted to achieve extremely attractive effects for two set-up boxes utilized by the Gales Chocolate Co. and merchandised through United Drug Co. retail outlets. The usual set-up box is first constructed with a foundation of box board and then dressed with its box covering. In contrast, the boxes here shown are manufactured of wall units prefabricated and assembled in the candy company plant as part of the packing process.

The box sides and tops are made of heavy foil mounted on a specially formulated embossing board and printed, embossed and die cut to the proper dimensions. The base board is of such a character as to permit of embossing to substantial depth and with a higher degree of accuracy than is usually the case. This permits the achievement of realistic filigree tooled metal effects. The embossed box sides and tops are applied at the candy plant to a light paper shell and the result is a very rigid, strong and handsome set-up paper box.

The new process, it is reported, is most economical when quantities run fairly large. Initial runs, it is stated, should be at minimums of 50,000 to 100,000 if this box-designing method is to be used with economy in contrast to the more traditional methods of box fabrication.

One interesting economy was effected in the production of the one- and two-pound boxes which may or may not be applicable to other jobs. This involved the use of the same embossing plates for both boxes. These plates consisted of a central cameo design surrounded by filigree work and edged by a sharply embossed border. On the smaller box, this border appears close to the edge of the top and side walls. On the larger, a substantial additional border of unembossed foil-covered board has been retained. Further contrast in appearance has been achieved by variation in the color of printing used and the two containers, therefore, appear to have related designs rather than identical designs. The joining point between front and side of box has likewise been integrated into the design, the underlying shell appearing as a sharp vertical line of standardized width forming a neat double-notched edge.

Credit: Boxes designed and fabricated by the Chaspec Manufacturing Co.

AMERICA'S EYES DO THE BUYING

How does Your Package Measure Up?

IN this modern day of streamlined automobiles, refrigerators, clocks and office furniture, it is obvious that your package must be modern and pleasing to America's eyes to make sales. Heekin Lithographed Metal Packages . . . colors on tin . . . carry thousands of diversified items to market. Heekin offers you its every service to help make your packages attractive. Packaging is advertising at its best . . . for it's the last advertisement that has to sell the consumer . . . Maybe we can help you.
THE HEEKIN CAN CO., CINCINNATI, O.

Heekin Cans

LITHOGRAPHED

With Harmonized Colors

Making it look bigger

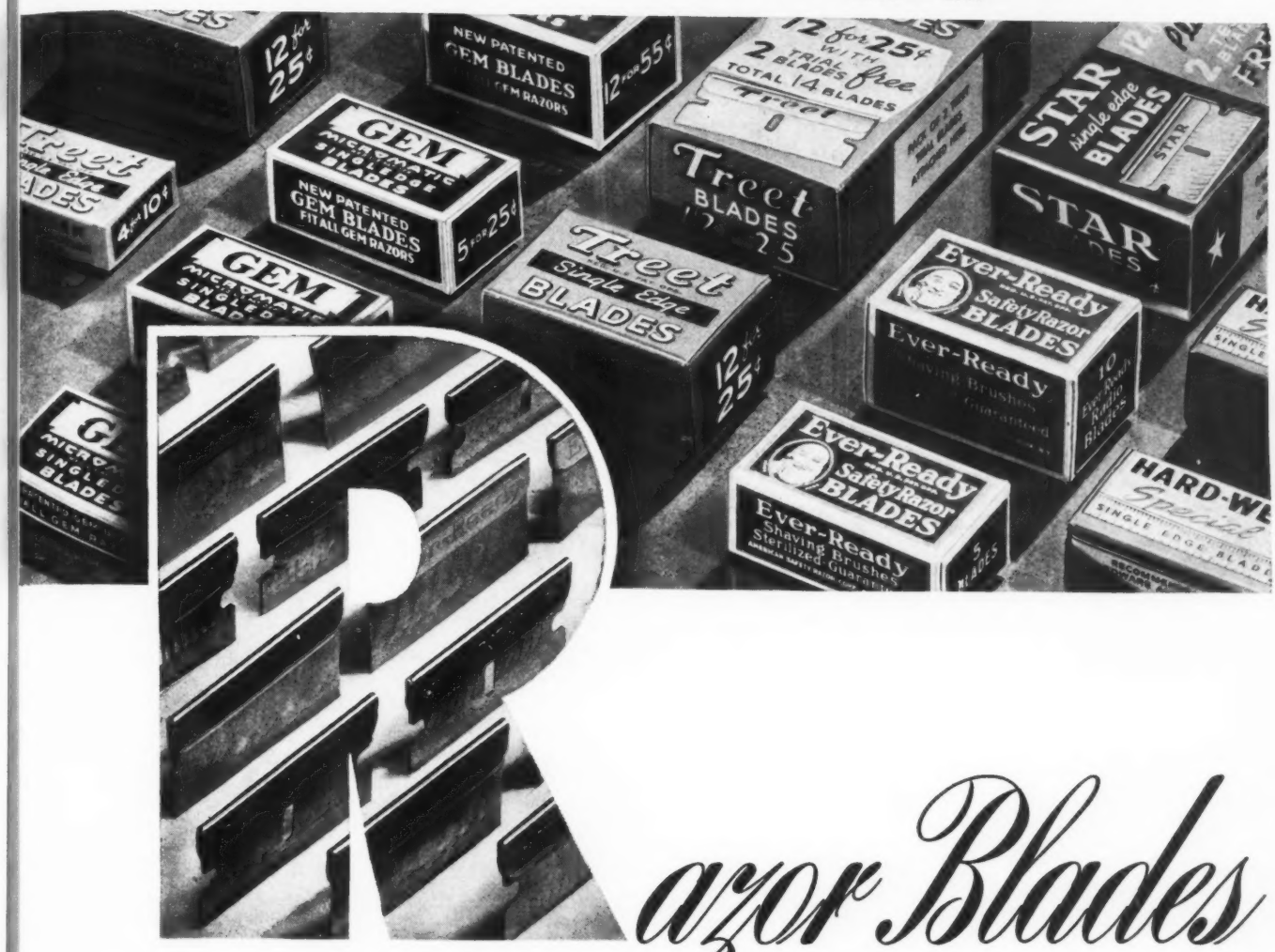
Perfumes come in small vials, but Surlin and Co. has found a way of stage setting its miniature packages

A dram is a dram. Under modern standards of regulation and of retailing efforts, it is not considered cricket to so distort the shape of a dram container as to make it look like an ounce or two ounces. Yet, if perfumes are to be sold as gift merchandise—and if volume is to be gained in the lower price brackets—it is essential that the manufacturer do something to increase the display value, the novelty value and the eye appeal of his dram containers, so that they may be properly positioned on retail counters and in store windows. If, in addition to securing display, the packages can be made to possess some element of humor or some novelty in appearance that will characterize them as gifts, experience has shown that sales will mount.

The problem has been neatly (*Continued on page 110*)

INDUSTRIES THAT PROFIT FROM Ridgelo SERVICE

Ridgelo CLAY COATED
REG. U. S. PAT OFF



azor Blades

Another leading industry in the use of quality folding cartons is the razor blade—Those neatly wrapped boxes you take as a matter of course are filled and sealed on ingenious machines. This high speed automatic operation puts the paper board to rigid tests—for snap—stiffness—folding quality.

Ridgelo clay coated boxboard meets these performance requirements through its uniform quality. It looks better through its smoothness and beauty of printed reproduction. Perhaps you belong to an industry profiting from Ridgelo boxboards—but are *your own* packages enjoying this advantage?

Send for samples—and compare!

Ridgelo
CLAY COATED
REG U. S PAT OFF
BOXBOARDS • CARDBOARDS
MADE AT RIDGEFIELD, N. J.
BY LOWE PAPER COMPANY

Representatives: E. C. Collins, Baltimore • Bradner Smith and Company and Mac Sim Bar Paper Company, Chicago • H. B. Royce, Detroit
Gordon Murphy and Norman A. Buist, Los Angeles • A. E. Kellogg, St. Louis • Philip Rudolph & Son, Inc., Philadelphia

Pickled delicacies are merchandised in Pliofilm envelopes so designed as to present all necessary information concerning the product while permitting visibility of the product. A partitioned corrugated container holds twelve of these transparent packages, protecting them during shipment and encouraging proper counter display in the retail store.

Package halves consumer costs

Transparent bag for pickled delicacies carries twice the quantity formerly offered for same price

Through the utilization of a new form of package, a new display-shipper and through the economy of a consequent reduction in package cost and shipping weight, the King-Fuller Co. has recently achieved substantial success in marketing pickled delicacies in quantities double those previously offered the consumer for the same ten cent retail price.

The new package consists of a Pliofilm envelope formed of two sheets of heat-sealed material, one sheet carrying the necessary imprinted legend, in white ink, so designed as to present all necessary information while permitting a full view of the product to the consumer. In addition to trade mark information and data required under the Food and Drug Act, the package contains directions for opening and for re-sealing the unused portion of the product, as well as a suggestion for possible later re-use of the container as an ice box utility bag.

To protect the container in shipment and to encourage proper display, a corrugated container has been developed which utilizes corrugated inserts to form a series of individual pockets or partitions, each bag thus being protected on all four sides from the adjacent containers by a double faced corrugated wall. The lid of the shipping container is labeled with an acetate laminated decorative sheet which completes the display and carries all necessary descriptive information.

Folders, supplied to dealers with each carton of 12 packages, explain the after use of the bags, suggesting not only the use as refrigerator food-saving bags, but potential usage as a corsage holder, tarnish-proof silverware case, traveling toothbrush kit or grease dripping sink bag.

The new container is reported to have opened up for the company several potential markets which were difficult of exploration when ordinary heavier containers and closures were utilized. Among these is the export market where considerable savings will be effected on import duties in countries where this is determined on the basis of advalorem weights. (*Continued on page 101*)

Service for Can Buyers

Crown makes metal containers promptly and expertly.

Here at last is an organization with one policy for all—fast, efficient, courteous service.

Perhaps this explains the remarkable growth of Crown Can sales and the fine spirit of good-will between Crown and its customers whether they are large or small.

You will like Crown's service on cans. Be sure to get Crown's proposition on your next order.

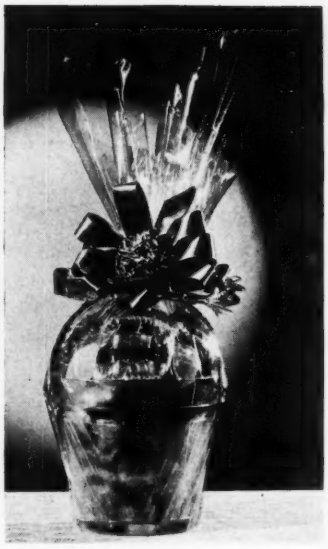
CROWN CAN COMPANY, PHILADELPHIA, PA.

Division of Crown Cork and Seal Company

BALTIMORE ST. LOUIS HOUSTON MADISON ORLANDO
FORT WAYNE NEBRASKA CITY

CROWN CAN

INDEPENDENT AND HELPFUL



Simplified gift line pays

Sales—and the profit curve—turned upward when Promotion Units, Inc. rationalized its gift planning

The average manufacturer is concerned with holiday promotions—if they concern him at all—only as a means of garnering extra sales above and beyond those to be achieved over the year through his regular day-by-day sales efforts, advertising and promotions. Not so, however, with Promotion Units, Inc., a company that has specialized in creating promotional merchandise to meet the requirements of retailers and particularly of department and chain stores. Such stores usually have from ten to twelve extensive promotions annually—Christmas and Easter holiday periods, Mother's Day, Father's Day, Thanksgiving, store anniversaries and similar occasions varying from city to city and store to store. For such occasions, special merchandise must be designed—eye appealing, attractive and having qualities not ordinarily built into, or expected in, the standard over-the-counter items of everyday sale.

The current line of Promotion Units, Inc. reflects the conclusions drawn from a recent survey which the company conducted over a wide group of stores located throughout the country. This survey disclosed the fact that the largest sales volume was enjoyed by stores who featured gift packages (filled with candies, novelties and delicacies) which sold from $1.00 to $2.00 retail. Over 62½ per cent of all sales were in this category. The next bracket of 27 per cent consisted of sales from $2.00 to $5.00. The balance, about 11 per cent, was in the higher brackets, from $5.00 to $25.00. This latter group included steamer baskets and similar expensive occasion presentations.

Prior to last year, the company had produced a more extensive line in gift packages, retailing from 15 cents to $15.00. After conducting the survey, described above, it decided to change its sales and merchandising policy and to produce only items that retailed from 50 cents to $2.00, thus concentrating its products within the field which seemed to offer the largest opportunity. This has not merely appeared attractive in theory. It has worked out as well in practice. Since inaugurating this policy about a year ago, sales are reported to have expanded rapidly. Moreover—and quite as important—manufacturing operations have been simplified to such a degree as to cut overhead and labor costs by 12 per cent within a year.

This reduction followed upon the introduction of mass production methods, made possible by a reduction in the number of items in the company's line. Substantial reductions in inventory requirements likewise occurred. The company's buying power is concentrated over fewer varieties of material and hence better prices were obtainable by quantity buying.

The scope of these economies is, perhaps, best appreciated by considering one or two specific instances. Thus each special package usually requires a separate sized piece of transparent cellulose sheeting as its final

a new book about clay-coated board

• Consumer meets package — for better or worse. This fateful moment of impression needs *all* the contributions Wabaco clay-coated boxboard has to offer. They are many and they are vital to successful packaging. Container Corporation explains how and why in a new booklet — clip this coupon for your copy of "Consumer Meets Package."

CONTAINER CORPORATION OF AMERICA
111 West Washington St., Chicago, Ill. *Dept. MP-10*

Please send me a copy of "Consumer Meets Package," your new book on clay-coated board.

*Name*_____

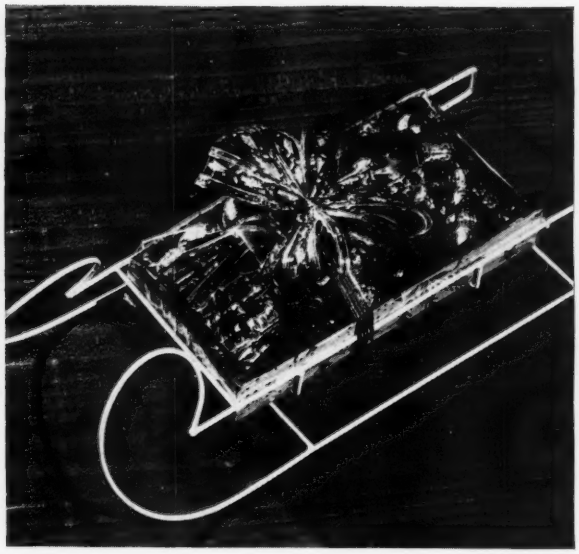
*Address*_____

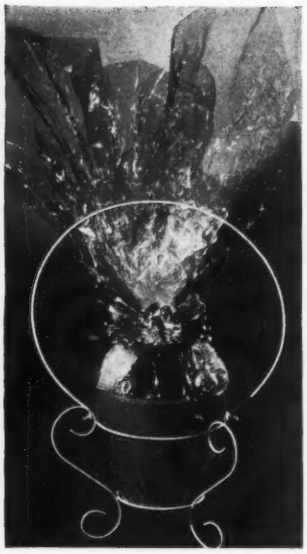
*Company*_____

*City*_____ *State*_____

CONTAINER CORPORATION OF AMERICA

GENERAL OFFICES: 111 WEST WASHINGTON STREET, CHICAGO, ILLINOIS . . . New York • Rochester • Philadelphia • Pittsburgh • Akron
Cincinnati • Cleveland • Detroit • Peoria • Rock Island • Fort Worth • Minneapolis • St. Louis • Indianapolis • Wabash • Anderson, Ind. • Natick, Mass.





outer wrap. By cutting the line from 50 sizes to 10 sizes, an extensive reduction of inventory and packaging space requirements immediately was attained.

These savings have, in substantial part, been passed on to the ultimate consumer and the improvement in the value per dollar retail cost of the various products has, in turn, served as an incentive to retail store buyers for the placement of larger orders. The analysis of the market which led to the new policy would thus seem to have started, for Promotion Units, Inc., a distinctly non-vicious circle or spiral of increasing trade. Studies of the operations of individual stores who handled the products of this company, under both the old and the new policies, have shown that the new policy has produced advantages for the retailer as well, in terms of simplified purchasing, lowered inventory, lowered handling costs and—as a final and important result—a more substantial gross profit based on a larger and faster turnover.

The new policy finds its reflection, of course, in the design of the company's merchandise. An examination of the illustrations accompanying this article will disclose the fact that the items have been designed for what might be termed "flash appeal"—i.e., the ability to stop the harassed shopper. For this purpose, glistening sheets of plain and colored transparent cellulose are utilized in conjunction with ribbon ties to build up scintillating, light-reflecting packages. But flash appeal is not their only boast. Having stopped the consumer, it is necessary to convince her that some feature of the product distinguishes it from everyday merchandise. For this purpose, virtually every container is made to possess a distinct after use. Wicker containers take the form of sewing trays, utility baskets or cocktail trays. Wire display containers assume the shape of flower pot table brackets, juvenile toys or package storage holders. Glass packages are favored for their obvious re-use (*Continued on page 108*)

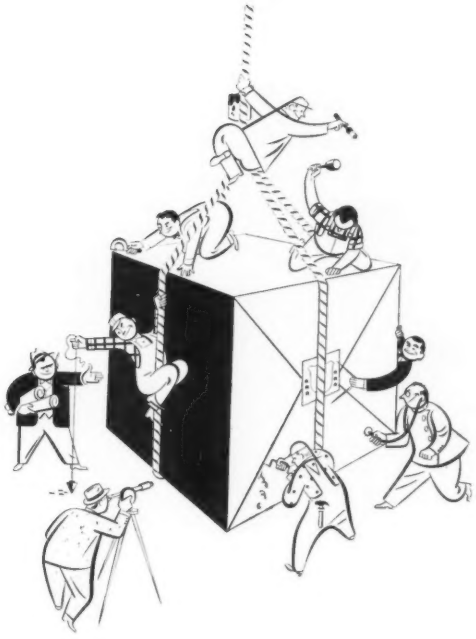
HEADQUARTERS FOR CREATIVE LITHOGRAPHY

YOUR aim is to sell more goods . . . our desire is to help you. These examples of the creative advertising material that flows from the Forbes plant, with colorful, creative art maintained at its power peak, indicate how we've helped others — sound merchandising ideas exquisitely reproduced, every one; and each a sound reason for you to **Consult FORBES for Creative Coöperation**

FORBES LITHOGRAPH CO.

P. O. BOX 683 BOSTON

NEW YORK CHICAGO CLEVELAND ROCHESTER DETROIT



A Survey BY THE INSTITUTE OF PACKAGE RESEARCH

Testing display effectiveness

A survey of display testing methods illustrated with case histories*

The testing of packages is an occasional procedure, usually arising from a dissatisfaction with the performance of existing packages and a contemplated package change. Display testing, on the other hand, should be a continuous procedure by which display users seek to evaluate the potentialities of proposed displays. For most companies, this is not the case. Most companies judge proposed displays on the basis of previous experience, of remembered reactions of individual dealers or of the plain likes or dislikes of the advertising and merchandising staff.

Some firms, however, have made some important advances in the field of testing and it is the purpose of this survey to discuss these tests and to seek to derive from them a basis of procedure which might be followed by other manufacturers with satisfactory results.

A discussion of display testing is a logical companion piece for a discussion of package testing. The methods and findings of each have something useful to contribute to our knowledge of the other.

The practice of testing manufacturers' displays in retail stores very likely followed close on the heels of the first use of such material. Most manufacturers who have used window and counter displays to any extent have at some time tested their material for certain kinds of essential information. But such tests have seldom been continued over very long periods of time and their results have been often considered of too private a nature to be shared with other manufacturers. There is no way of knowing at this time what proportion of such tests have never been published, but it is apparent that too few have been published.

The result is that compared to the widely publicized testing of other media, little or nothing seems to have been done about displays. Another result is that no standardized procedure has been developed by which the results of a number of tests might be compared or integrated into an informative mass of evidence.

A promise for the future is held out by the recently organized Point of Purchase Advertising Institute, Inc. This is a research organization sponsored by a group of display producers throughout the United States. It may convince manufacturers that by pooling their

* The Institute of Package Research is deeply indebted to Lincoln Jones, consumer market counsel and director of research at Kindred, MacLean & Co., Inc., for invaluable aid in research and in the preparation of the test analysis system incorporated in this study.

A LIST OF DISPLAY TESTING OBJECTIVES

1. **Kind of test**
   - a. sales results
   - b. traffic count
   - c. opinion
   - d. some combination of the first three
2. **Display utility tested**
   - a. attention value (copy, design, color, motion, light)
   - b. tie-in with package display and other media
   - c. comparison with other media
   - d. preference of retailers
   - e. sales potentials of outlets
   - f. display compared to no display
3. **Part or retail store tested**
   - a. window
   - b. counter
   - c. fixtures
   - d. floor
   - e. hanging (festoon)
   - f. combinations of above
4. **Field of data**
   - a. survey sample
   - b. complete enumeration
5. **Criteria**
   - a. population
   - b. sales
   - c. traffic
   - d. other media
6. **Results—conclusions drawn**

individual findings with the Institute, they will share in a more exact knowledge of this medium, the value of which will more than compensate for whatever private experience they may disclose.

In the meantime, a number of display test reports have been gathered, compared and are here presented in a form to suggest the variety of kinds of testing that has already been done; the kinds of results that have been obtained and, perhaps, the faint outline of a standard procedure for future testing. This group of display tests has been taken from published and unpublished material, dated from 1921 to July of 1940. Each test discussed on the following pages has been analyzed to determine the degree to which it conforms to Chart A—a list of display testing potentials. The reader will find, after each test, a footnote listing those elements of Chart A which each test incorporates. It thus becomes possible to compare each testing procedure with the tentative "complete test" and with all other tests.

It should be understood, of course, that Chart A does not—in itself—outline the ideal test. It rather seeks to outline the sum of all possible tests and thus to permit analysis of any given actual or proposed test. A number of factors listed in Chart A are alternative factors. It is obvious, therefore, that the wise display tester, in setting up his procedure, will first seek to decide—on the basis of the individual problem—just which factors in Chart A should be considered in the current testing operations. Having done so, he will be able, through the use of this survey, to correlate his procedure with others which his predecessor testers have utilized to achieve the same desired ends.

★ ★ ★

Test 1

Where conducted: In drug stores.

Product: A well-advertised tooth paste, newly adopted display container.

Test sample: 20 drug stores.

Method: Comparing sales without display and with display container on counters during equal periods of time.

Results: Three weeks without display—sales, 155 tubes. Three weeks with display—sales, 412 tubes. Increase achieved by display, 165 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increased 165 per cent).

Test 2

Where conducted: In drug stores.

Product: Herb tea.

Test sample: 10 drug stores.

Method: Comparing sales without display and with display container on counters during equal periods of time.

Results: Three weeks without display—sales, 26 packages. Three weeks with display—sales, 63 packages. Increase achieved by display, 142 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increased 142 per cent).

Test 3

Where conducted: In drug stores.

Product: Medical tea.

Test sample: 9 drug stores.

Method: Comparing sales without display and with display container on counters during equal periods of time.

Results: Three weeks without display—sales, 24 packages. Three weeks with display—sales, 57 packages. Increase achieved by display, 137 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 137 per cent).

Test 4

Where conducted: In grocery stores.

Product: Well-known extract on market 50 years.

Test sample: 14 grocery stores.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales, 68 packages. Three weeks with display—sales, 154 packages. Increase achieved by display—126 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 126 per cent).

Test 5

Where conducted: In grocery stores.

Product: Well-known soup product on market 10 years.

Test sample: 21 grocery stores.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales 1,068 cans. Three weeks with display—sales, 1,824 cans. Increase achieved by display—70.8 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 70.8 per cent).

Test 6

Where conducted: In grocery stores.

Product: New brand of soap, not well advertised.

Test sample: Number of outlets in test not given.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales, 52 packages. Three weeks with display—sales, 153 packages. Increase achieved by display—194 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 194 per cent).

Test 7

Where conducted: In candy stores.

Product: Five-cent confection.

Test sample: 15 stores.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales, 384 packages. Three weeks with display—sales, 1,074 packages. Increase achieved by display—180 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 180 per cent).

Test 8

Where conducted: Not specified.

Product: Testing a number of hand-made dummies of ideas, made up for use in windows.

Test sample: Stores in Stamford, Conn.; Bridgeport, Conn.; New Haven, Conn., and Hartford, Conn.

Method: Dummies were rotated from store to store over a period of several weeks. Traffic checked at each display location and number of "lookers" checked for attention value of each piece.

Results: Not stated.

Reference source: Window Display Advertising Assn. Proceedings, 1927. Carl Percy address, page 133.

Chart correlation: 1b, 2a, 3a, 4a, 5c, 6 (not stated).

(*Continued on page 103*)

display gallery

1 Cleverly designed for effective display and maximum convenience, this handsome counter cabinet of the Robeson Cutlery Co. has eight interior stock compartments, each holding a dozen or more knives. A transparent acetate sheet replaces the traditional glass, reducing weight, shipping costs and breakage danger. The sheet is carried in a curve over the lower front frame, increasing the openness of the design. The top section is hinged to permit access to the displayed items. Cabinet by the Rochester Display Fixture Works. Transparent acetate sheeting by the Eastman Kodak Co.

2 A simple die-cut sheet forms this three-dimensional counter display platform for Lederle Laboratories' Vi-Delta emulsion. Lithographed in six colors, the unit has been produced in two sizes to accommodate the standard Vi-Delta containers. Folding flat, the displays are shipped to the dealer complete with the merchandise. Designed and lithographed by The National Process Co., Inc.

3 A drawn section of transparent acetate forms a sparkling transparent curved window for Briarcraft pipes. The acetate sheet is set into a die-cut cardboard back to form a sturdy fixture providing full protection against both dust and pilferage. Designed and manufactured by Design Center, Inc. Transparent acetate sheeting by Plastics Division, Monsanto Chemical Co.

4 This wire rack, recently adopted by Gem Electric Mfg. Co., Inc., brings the usual bottom-drawer fuse plugs onto retail counters. Compact, the fixture holds 250 fuses in an area of 7 in. sq. The five tracks each holds ten boxes and since the unit revolves on its base, each size is easily reached by clerk or customer. Manufactured by the Manhattan Wire Goods Co.

5 Lithographed upon a sheet of clear acetate, this display is designed to be placed directly against plate glass store windows. As used by Johnson & Johnson, it creates the im-

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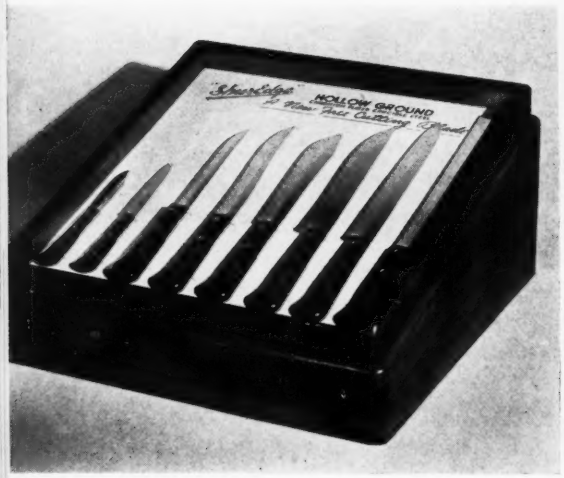

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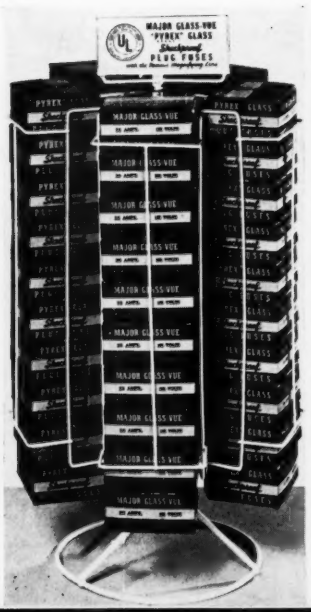

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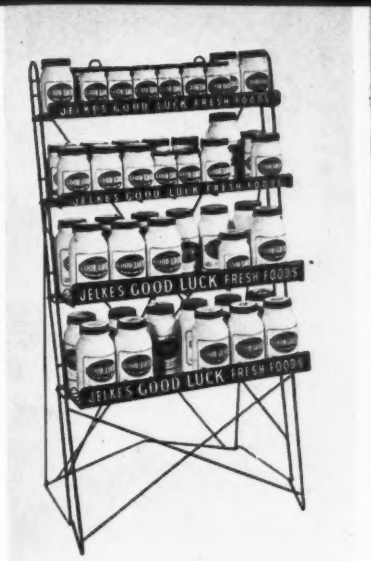

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pression that the window has actually been broken by the large display tooth brush. The unit has proved an effective stopper, according to retail druggists. It is delivered, complete with gummed transparent tape, to retailers ready for installation. Produced by The Forbes Lithograph Co. Transparent acetate sheeting by the Celluloid Corp.

6-7 John F. Jelke Co. utilizes effective displays both in windows and on store floors. The merchandise floor stand, constructed of wire and decorated sheet metal, has achieved a 75 per cent retention by dealers after almost a year of use. The window panel cleverly introduces a reproduction of a Jelke outdoor poster. A package of the Jelke product peeks out of the bag carried by the elderly gentleman. Wire rack by Kerr Wire Products Co. Window display manufactured by Niagara Lithograph Co.

8 Timeliness is the keynote of this cleverly constructed window display for Eveready flashlight batteries. It forecasts the coming of longer nights and advises the reloading of flashlights now. Built in the shape of a signpost with autumn leaves depicted at its base, the display has a shelf piece for a pyramid of actual batteries. Side cards follow through on the pyramid design by lithographed reproduction and these pieces may also be used for counter presentation. The complete display was designed primarily for use in syndicate stores. Lithographed in full color by The Forbes Lithograph Co. and created by that company in collaboration with National Carbon Co., Inc.

9 Liebmann Bros., brewers of Rheingold beer, have for some time been using the same model as "Miss Rheingold of 1940" for the promotion of its product. The model, Jinx Falkenburg, here appears in the central panel of a window display which likewise features two side panels bearing photographic illustrations of bottled and canned Rheingold beer. Designed and produced by Einson-Freeman Co., Inc.

10 A complete merchandising campaign—with all the necessary sales helps—is supplied the dealer in a single shipping case by C. D. Kenny Co. Attached to each bag is a premium coffee measure. The display case is so constructed as to provide a back panel and slanting front type panel integral with the shipper. Designed and manufactured by The Hinde & Dauch Paper Co.

1

2

1. This wall or counter bracket is illuminated by a 30 watt bulb. The design and lettering is fired into the glass itself. Overall dimensions, 7 in. by $4^3/_4$ in. by $12^3/_4$ in. **2.** Here the shape of the glass has been cut to reproduce a bottle of Brucks beer. The glass is convexed and the unit is made to either hang on a wall or rest on the base, as desired. Overall dimensions, 6 in. by $5^1/_2$ in. by 17 in.

Heat treated glass displays

To one familiar with the multitude of display materials and types available and in everyday use, it would seem that innovations in this field are hardly necessary. Yet, since attractiveness of display depends, to a high degree, upon the eye-attracting value of novelty, display users have been ever receptive toward new materials and new methods, particularly where these offer the possibility of achieving effects heretofore unobtainable.

One such novel type of display, which has recently won acceptance from a substantial group of display advertisers, utilizes fine mesh silkscreen reproduction fired onto glass and illuminated from the rear. By this method, it has been found possible to reproduce, for permanent use locations, replicas of packages, trade marks or even complete pictorial advertising presentations.

The method of reproduction—while it sounds complicated in description—is not inherently expensive. It starts with the photographing of the actual package to be duplicated. This is re-touched and then re-photographed. A negative is then (*Continued on page 110*)

3

4

3. Designed to hang on a wall as a fixture assuring permanency of display. An on and off pull switch is attached to the hanging wall lantern. Overall dimensions, $5^1/_2$ in. by $4^1/_4$ in. by $11^1/_2$ in. **4.** The base of this display is of a special stamped type. Glass is convexed and illumination is achieved through the use of a 30-watt bulb. Overall dimensions, $7^1/_2$ in. by $4^1/_4$ in. by 14 in.

Simplifying the dealers' handling problems

The Lamson & Sessions Co. utilizes display cabinet and transparent bags to arch bolt and nut sales

When you set out to please your wife, and bolt that hanging fence gate, you have a pretty good idea of what you want and a pretty poor vocabulary with which to tell it to your dealer. The chances, The Lamson & Sessions Co. has long realized, are about ten to one that you would make the retailer open from five to ten full-telescoping boxes before you found what you wanted and left a nickel in his till.

To make such small sales profitable and to get its product into view, this company has recently introduced into retail stores a display cabinet of metal construction having seven banks of partitioned compartments, each identified for a particular variety of nuts and bolts. Measuring 28 in. square and 14 in. high in the rear, the unit is finished in black and red enamel and makes for a very attractive and orderly appearance on the retailer's counter. The bins provide room for 49 different varieties and sizes and open display has had the effect of encouraging dealers to maintain full stocks.

While no problem was presented in the display of the larger varieties, it was found desirable to make special arrangements to facilitate the sale of smaller nuts. For this purpose, small transparent cellulose bags, printed with the necessary identifying legends, have been adopted, each bag holding five cents worth of nuts and bolts of a specified size and type. The use of these unit containers is reported to have found much favor among dealers because of reductions in time required to serve a customer, fixing of the unit of sale and reductions in pilferage losses.

Credit: Bags by The Munson Bag Co. Transparent cellulose material by Cellophane Division, E. I. du Pont de Nemours & Co., Inc. Metal display fixture by Feick Manufacturing Co.

1

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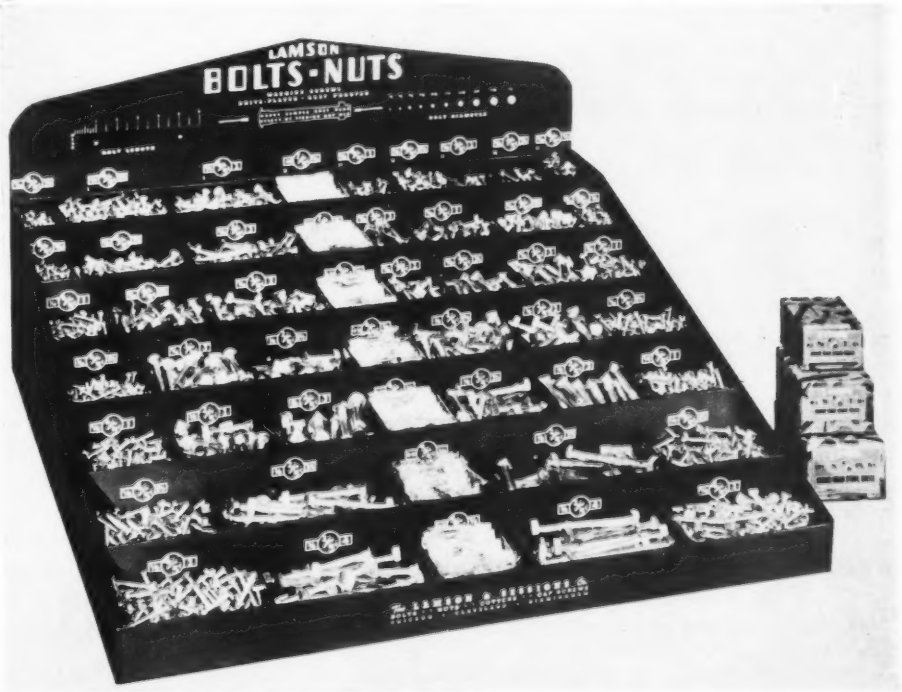


1. Transparent bags save dealer time and assure consumers of a complete matched selection of nuts and bolts. **2.** Forty-nine pieces of varied size are provided within a counter area of 28 in. square. The rising tiers make for good visibility and open display encourages dealers to keep complete stocks. Note seven partitions with transparent packets for the smallest nut sizes.

SPEED 380
WRAPPED PACKAGES PER MINUTE

Forget it officer - - - there's no limit on this highway - - -

In fact, *speed* in a wrapping machine is a highly desirable SAFEGUARD—prevents heavy costs and tie-ups in the wrapping department, the "bottle-neck" of production.

Here's a machine that's *really fast*—our Model CM-2. Wraps 250 to 380 packages per minute, depending on the size and nature of the package. . . . Yet it operates with the utmost smoothness and efficiency. That means good design, rugged construction, assurance of long life.

Extremely compact (only 4′3 1/4″ x 3′6″), the CM-2 is a decided improvement over former machines used for the same type of work. Designed to wrap comparatively small packages. *Adjustable for various sizes within its limits.*

The CM-2 was introduced only a short time ago, yet it has already been adopted as standard equipment by drug manufacturers and makers of cigarettes, cough drops, razor blades, mints, etc. If you want to know more about it, write for descriptive folder on the Model CM-2.

PACKAGE MACHINERY COMPANY, Springfield, Mass.
NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO

Mexico, D.F.: Agencia Comercial Anahuac, Apartado 2303
Buenos Aires, Argentina: David H. Orton, Maipu 231
Peterborough, England: Baker Perkins, Ltd. Melbourne, Australia: Baker Perkins, Pty., Ltd.

PACKAGE MACHINERY COMPANY
Over a Quarter Billion Packages per day are wrapped on our Machines

PACKAGING PRODUCTION and TECHNIQUE

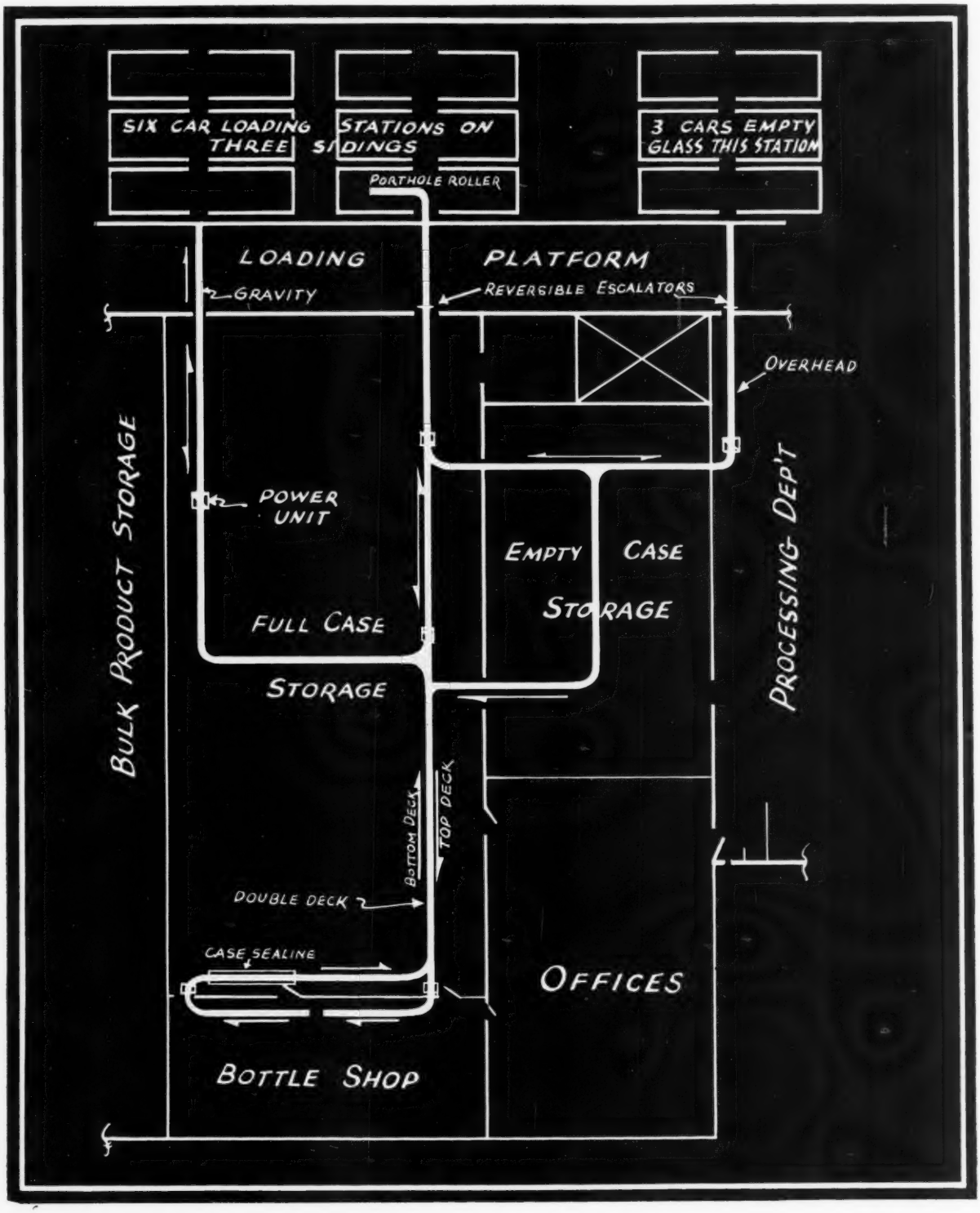
Glass or tin with equal ease

Rebuilt National Grape Corp. plant a model of both flexibility and packaging efficiency

In 1938, the National Grape Corp. commenced a program of modernization and expansion at its plant in Brocton, New York, to create a manufacturing unit which, now completed, is believed to be the largest and most efficient single plant for the production of grape juice in the country. The nucleus around which this construction work centers is the old plant of the Chautauqua & Erie Grape Growers' Cooperative Assn., Inc., previously known as the famous winery of the Ryckman Brothers dating back to 1859. Every effort has been made to combine with the long tradition of skill in the pressing of grapes, for both wine and juice, the most modern and efficient processing equipment now obtainable. The facilities for all phases of operation, including processing, storage, materials handling and packaging, were increased in accordance with a carefully balanced program.

In the processing of grape juice, the National Grape Corp. uses a method of controlled detartration in which it pioneered. This method involves the stabilization of the juice in bulk by means of refrigeration. By this process, the delicate fragrance of the Concord aroma and the rich zestful tang of the natural grape flavor are best preserved.

Grape juice is the pure unfermented juice expressed from the Concord grape. In manufacturing this product the grape bunches are delivered to the plant during the harvest season in 25-lb. trays or bushel baskets. The grapes are conveyed to the hopper of a destemming machine where they are given a gentle crushing and stripped from the stems, forming a thick pulpy mass. This pulp is then preheated under controlled conditions and pressed in a battery of ten hydraulic presses under forces up to 3200 lbs. per sq. in. The juice flowing



1. Conveyor system layout. Trough type conveyors are used to elminate differences in elevation throughout the plant and make possible complete reversibility of all conveyor lines. Conveyor system has been laid out to facilitate the uninterrupted passage of containers through the plant from the time they are unloaded as cases of empty glass in reshipper cartons to the point where the full cases, after having passed through the bottle shop and case sealing department, are loaded into trucks or cars.

from the presses is screened, sterilized by flash heating and quickly cooled. Before being placed in the 50,000 gallon specially lined concrete tanks where controlled detartration is carried out during storage, the juice is refrigerated. Once filled, the tanks are sealed and maintained at low temperatures in air conditioned insulated rooms.

The recovery and stabilization of the grape juice constitutes the first phase of a two-phase process. The second part of the operation is concerned with the withdrawal of the juice from the sealed tanks, with or without additional sweetening, and the controlled packaging of the product. Problems of packaging fall under three categories. First, quality control of the product to assure retention of the premium characteristics of the carefully stabilized juice. Second, production control for maximum bottle shop and materials handling efficiency, with a resulting decrease in production costs, and, third, but of equal importance, control of sales appeal by the use of containers and labels which match in arresting appearance and finesse the desirable natural goodness of the juice inside the bottle.

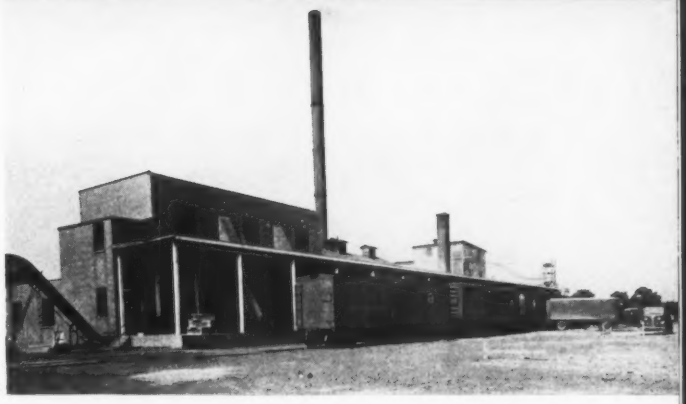
In order to insure quality control, the handling of the juice is at all points carefully checked and automatically regulated. In the new bottle shop, all piping, filler valves and other equipment with which the juice comes in contact is polished stainless steel which insures the elimination of metallic contamination and at the same time increases the life of the equipment and simplifies cleaning. Temperature of preheating and pasteurizing in the bottles is maintained by precision air-operated controlling instruments. A double response full scope installation on a plate preheater makes possible the maintenance of uniform flash heating temperatures, regardless of load fluctuations. Bottle pasteurization temperatures in a special pasteurizer are held constant by similar instruments and checked constantly by means of a travelling temperature recorder.

Even more important to quality control and shelf life of the product is the care which is taken to reduce the amount of oxygen in the head space of the bottle to a minimum. An improved method of bottling prevents the occurrence of harmful oxidation reactions which otherwise would occur during the subsequent storage of the packaged juice.

The entire program of quality control is supervised and coordinated by I. E. Friedman, the chief chemist, working with trained assistants in a new and well-equipped food laboratory, adjacent to the bottle shop. Here, also, constant efforts are made to discover new and improved methods of supplying even better grape juice and grape products to the public.

In dealing with the problem of conveying and packaging machinery, the major object was to install a system which would be as nearly fully automatic as possible and at the same time extremely flexible. Considerable attention was given to the elimination of double handling operations which had been necessary in the past when all case conveying was handled by flats and dollies and many of the packaging machines were hand fed.

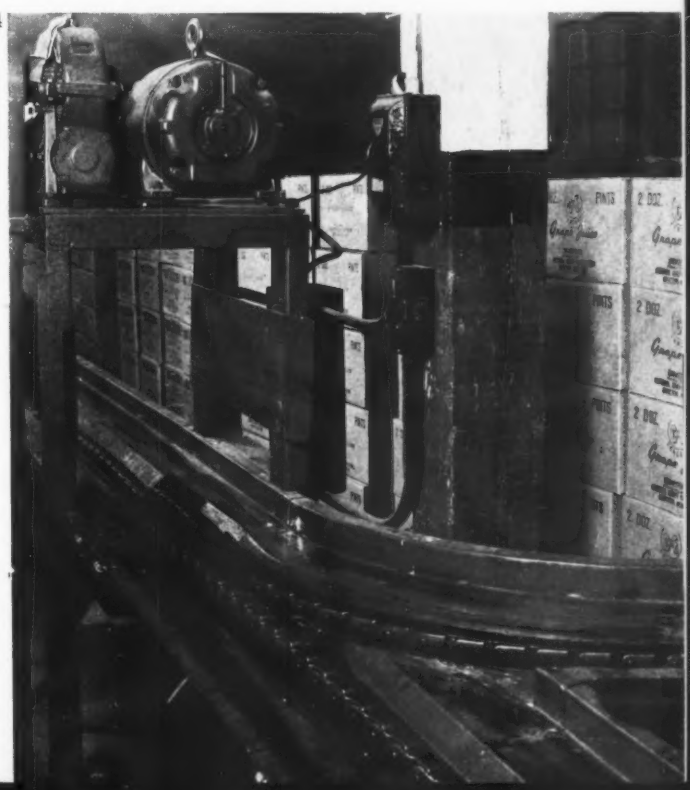
2

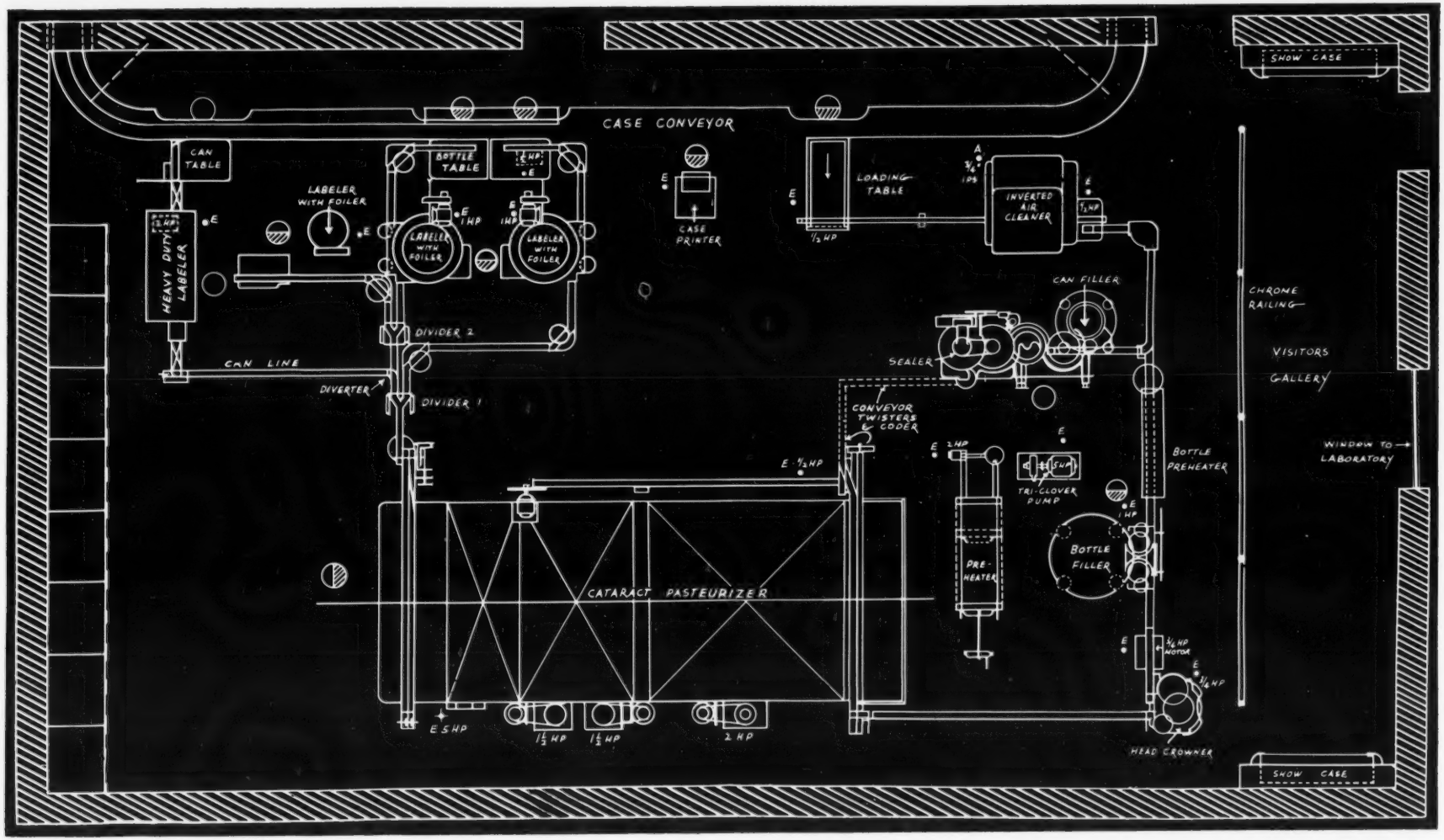


3

2. Rear view of the remodeled plant showing the receiving dock and methods of loading. Note truck being loaded through standing freight car. **3.** Escalator conveyor at unloading station. Trough conveyors are utilized with chain belt drive. Note lifting links periodically spaced on chain belt. **4.** Power unit and "Y" switch on conveyor system. Containers are guided by trough and transfer easily from one chain to the next. All three chain driving gears are on the same axle.

4





5. General layout of the bottling room. A visitors' gallery is separated by railing from the work area. Alternative routes are provided for cans and bottles, permitting the utilization of many facilities for both types of containers and permitting a quick change-over from one to the other. Dividers in the conveyor line permit the supplying of all labeling units or of any one at any time. This installation is designed particularly for the handling of special labels and small lot orders at the same time that the major portion of the product is being packed for large orders. Labeled packages discharge to the pack-off table for return to the case conveyor and movement to shipping dock or storage room.

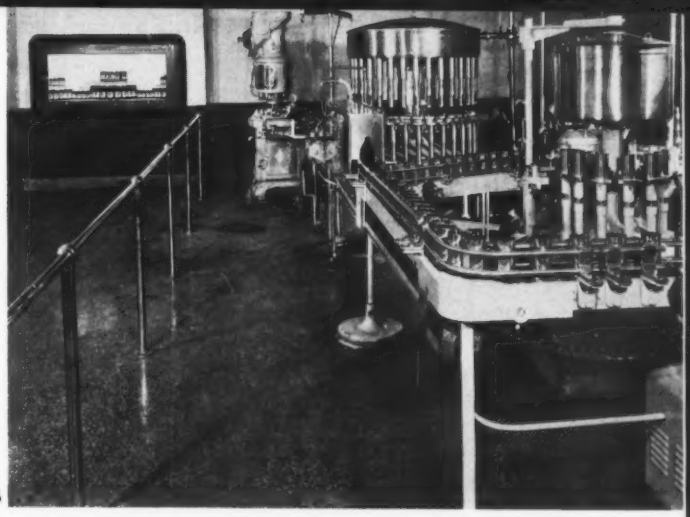
A conveyor system has been laid out to facilitate the uninterrupted passage of containers through the plant from the time they are unloaded as cases of empty glass in reshipper cartons to the point where the full cases, after having passed through the bottle shop and case sealing department, are loaded into trucks or cars. In order to eliminate differences in elevation throughout the plant and make possible complete reversibility of all conveyor lines, trough type drag chain power conveyor is used throughout the installation, except within the freight cars and at the point of loading where the added flexibility of roller conveyor has been found more satisfactory.

An important feature of the new packaging installation is the fact that it is designed to handle cans as well as five sizes of bottles. When cans are used, they arrive at the plant in reshipper cartons and are treated in the same manner as the bottles which are also received in corrugated cases.

Cars of empty glass are received at the company's triple track siding in the rear of the plant. By having three parallel tracks, it is possible to spot the cars of empty glass three deep at the unloading station and convey the cartons through successive cars into the plant. Glass is unloaded onto a lightweight portable roller conveyor which connects directly to a drag chain escalator leading into the plant and elevating the cases to warehouse level. A productimeter counts the cases as they enter the empty case warehouse through which the conveyor passes on its way to the bottle shop. In the empty case warehouse, extra stock cartons may be stacked off, but generally speaking, the flow is continuous through the plant and the conveyor system is run at a rate which synchronizes with the production speed in the bottle house. After passing through the empty case warehouse, the cartons move onto a double deck conveyor which brings them into the bottle shop. At the entrance of the shop, another case counter tabulates the number of units entering for filling. The conveyor terminates in the bottle shop at a unique pack-off table. This unscrambling device is equipped with a tilting table on which the case of empty bottles is inverted and permits one man to handle as many as 160 containers per minute to the air cleaner.

In the air cleaner, the bottles are inverted and subjected to a 60-lb. blast of filtered air to remove particles of lint and foreign matter which are sometimes present. From the discharge of the air cleaner, the bottles are conveyed through a preheating hood where they are subjected to a steam-heated atmosphere. Before reaching this point, they also pass a counting station where another productimeter totalizes the number of empty units fed to the filler. The preheated bottles are filled with hot juice on a 32-valve gravity type filler by means of a worm feed. Hot juice is supplied to this filler from a plate heat exchanger, using hot water as preheating medium. The temperature is carefully controlled by sensitive instruments. Immediately following the filling operation, the bottles are capped in an eight-head crowner. (*Continued on page 106*)

6



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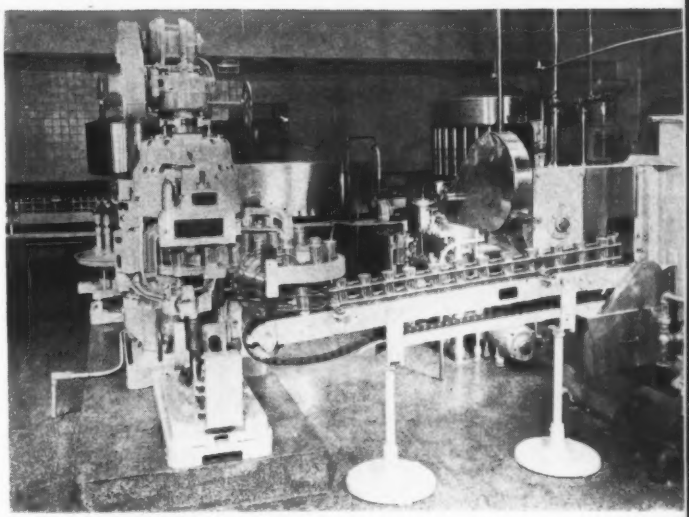
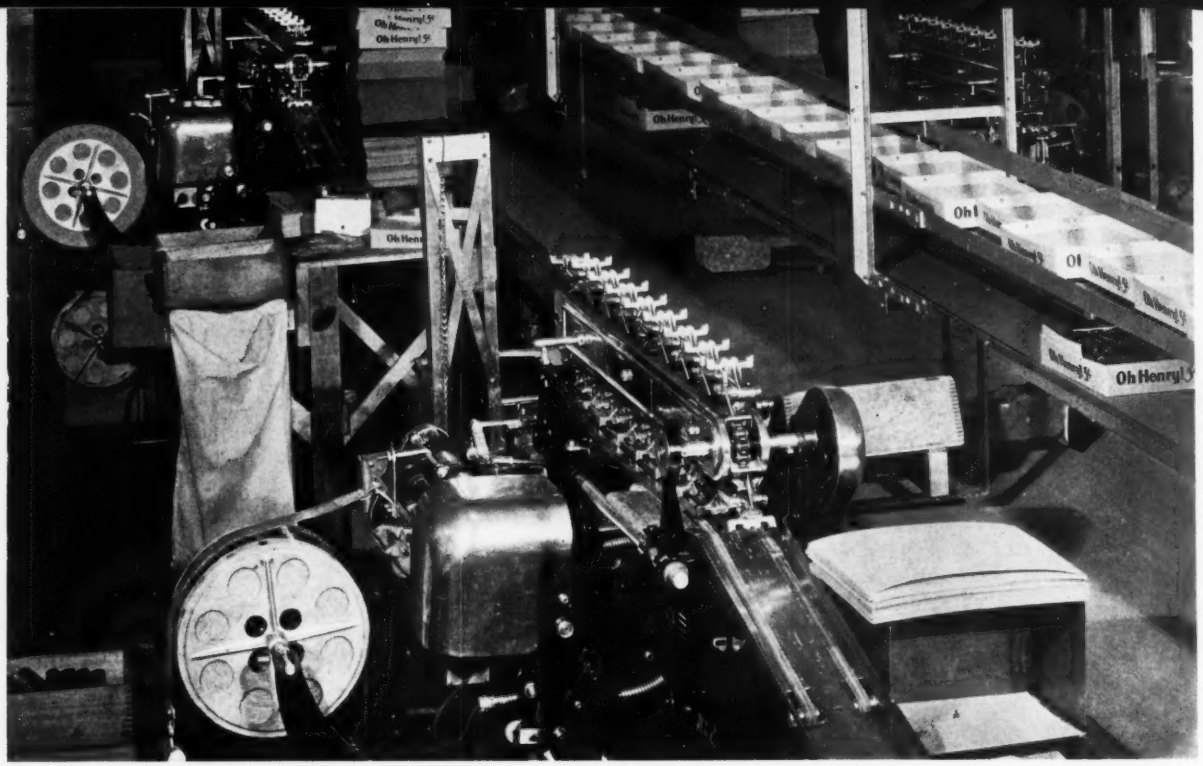


6. End of bottle shop showing visitors' gallery railed off from work area and showcase in gallery wall. Cans are leaving the air cleaning equipment and proceeding to can filler. Bottle equipment for filling and capping is shown in rear. **7.** Can coder, twister and inverter showing feed to pasteurizer. The coding device stamps identifying serial numbers on the sealed cans and discharges to a stainless steel reversing and inverting twister which insures proper sterilization of the top of the can by the hot juice. **8.** Lightweight bottles and newly redesigned labels are used on the C & E brand, principal product of the National Grape Corp.

8



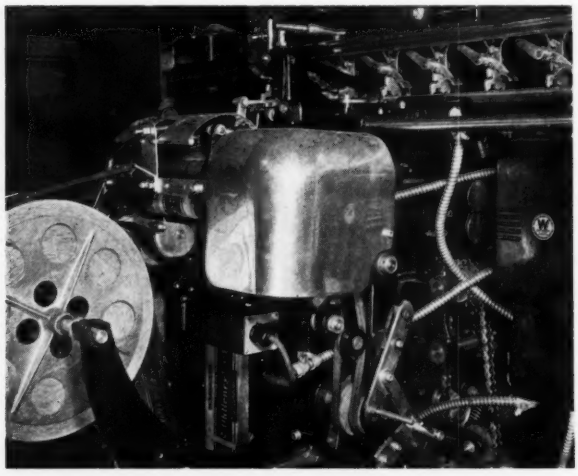
Irregular product automatically wrapped

Williamson Candy Co. uses 17 machines for daily output of over one million candy bars

The Williamson Candy Co. was confronted with a number of difficult technical problems in seeking to mechanize the wrapping of its Oh Henry candy bars. The bars were of irregular shape and hence presented certain difficulties. High-speed operation was desired, yet only a limited space could be allocated to the operation.

After a long search, machines which seemed to provide the solution were installed, on an experimental basis, in July of 1939. The first installation consisted of a battery of three machines of completely automatic operation. So successfully had these operated that the battery has since been increased to a total of 17 machines, each capable of operating at a speed of 100 packages per minute.

The machines are arranged in groups of three, receiving the output of a supply belt bringing approximately 300 bars per minute from the enrobing equipment. Two female operators are utilized for each machine, one feeding the bars from the enrober belt to the machine intake and the other placing the wrapped bars in cartons. A belt conveyor, situated immediately above the enrober belt, supplies (*Continued on page 106*)



Above: 80 to 110 Oh Henry candy bars are wrapped each minute by each of the 17 machines recently installed at the Williamson Candy Co. plant. Right: Close-up view of the scanner, photo-troller and various mechanisms employed to keep the flow of wrapping paper in proper register with the cutter.

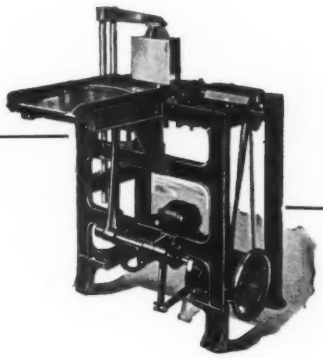
It's PETERS

CARTON PACKAGING MACHINES

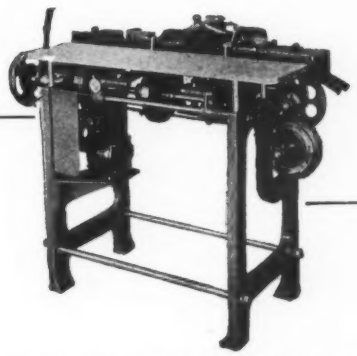
. . . for *Economical* Packaging

If you are using die cut cartons similar to the photograph and setting them up or closing them by hand, you can considerably reduce your packaging cost with these machines.

Type of die cut carton handled on this equipment



This PETERS JUNIOR CARTON FORMING AND LINING MACHINE sets up 35–40 cartons per minute, requiring only one operator. After the cartons are set up, they drop onto a conveyor where they are carried to be filled. If several size cartons are desired to be handled, machine can be made adjustable.



This PETERS JUNIOR CARTON FOLDING AND CLOSING MACHINE closes 35–40 cartons per minute, requiring no operator. After the cartons are filled, they enter machine on conveyor and are automatically closed. Can also be made adjustable to handle several different size cartons.

Send a sample of each size carton you are interested in handling and we will be pleased to recommend machines to meet your specific requirements.

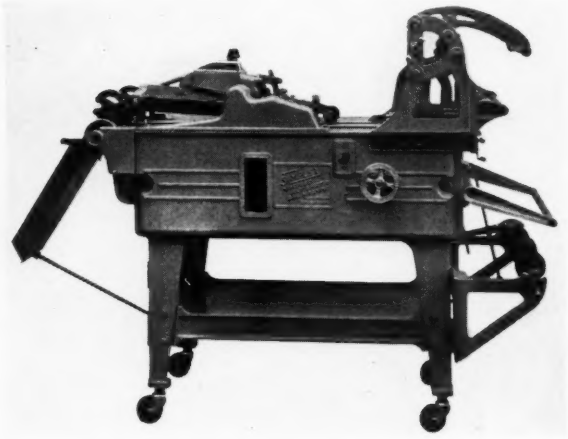
PETERS MACHINERY CO.
4700 Ravenswood Avenue, Chicago, Illinois

Equipment and Materials

NEW DEVELOPMENTS IN PACKAGING MACHINERY • METHODS and SUPPLIES

BAG MAKING MACHINE

Simplex Wrapping Machine Co. is marketing a new high-speed automatic bag making machine which is claimed to produce 2500 to 4000 bags per hour. The machine can handle bags from $1^1/_2$ in. to 9 in. wide, from 2 in. to 16 in. long. There is also a special machine for bags 20 in. long. Less than five minutes, it is reported, are required to change sizes. Bags may

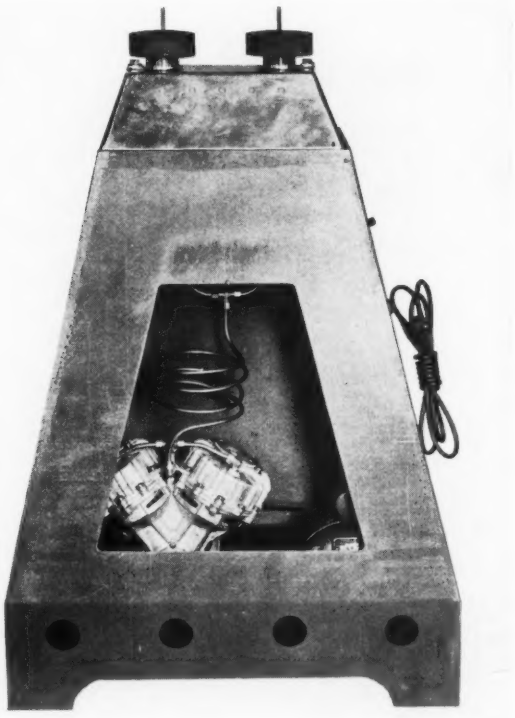


be made from heat-sealing materials such as cellophane, Pliofilm, etc. Flat type and gusset type bags, duplex bags and bags from spot design printed rolls may be made. A specially built photo-electric cell controls the position of the spot. A turn of a hand wheel regulates the depth of the gussets to any size up to the center of the bag. Interchangeable plates control width of bag. Changes in length are reported to be easily and quickly made by use of a hand crank. Feed of material is automatic from roll stock and heat control is thermostatic.

IMPROVED 2-TUBE CLEANER

Improvements made in the Model E-Z 2-tube air cleaner, introduced to the trade a few months ago, have been announced by the U. S. Bottlers Machinery Co. One of the major improvements in the cleaner is the installation of a 100 per cent oil-free compressor. This new compressor, like the one previously used, is a V-twin of the diaphragm type. It is said to insure clean oil-free air because it has no oil pumping pistons, cylinder walls or other oily surfaces with which the air comes in contact. The new compressor crankshaft is equipped with precision ball bearings which have been grease packed and sealed at the factory. This construction replaces the old sleeve type bearings running in a bath of oil in the crankcase of the compressor. The mounting of the motor and compressor on a common base and the suspending of them from the sides of the cleaner by means of springs has eliminated, it is claimed, all of the compressor vibration and belt noises formerly transmitted to the cleaner base.

An automatic belt tightening device has been incorporated in the new unit to keep a constant belt tension on the compressor drive. On the older models, the slack in the belt was taken up by loosening the motor



and moving it farther away from the compressor. The new method of taking up slack is accomplished by mounting the motor on a pivoted base. This base is attached to the main compressor base and the action of a tension spring keeps the belt tension constant.

AUTOMATIC ROTARY CLEANER

Sanitair is the trade name of a new fully automatic rotary bottle and container cleaning machine manufactured by the U. S. Bottlers Machinery Co. The machine, it is claimed, will handle a wide variety of styles and types of containers regardless of their construction. The new unit utilizes a blast of compressed air, at pressures of from 50 to 90 lbs. per sq. in., as a

Wrinkles?

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You can spend thousands of dollars designing and producing an otherwise perfect package—and then wreck its appearance by using the wrong adhesive.

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DIVISION OF

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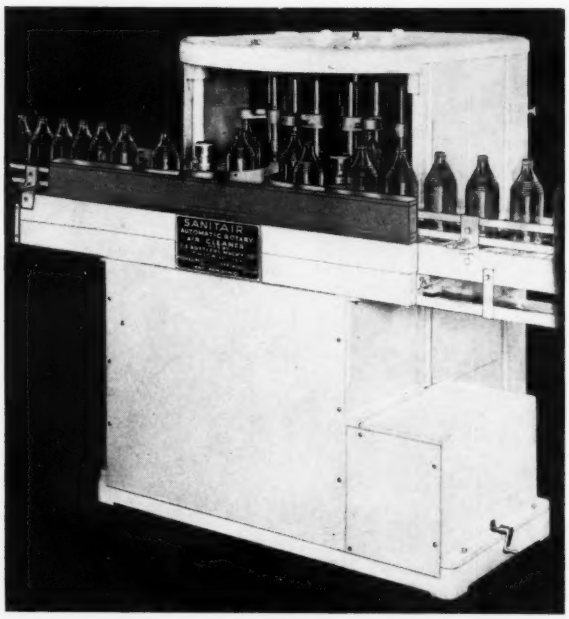
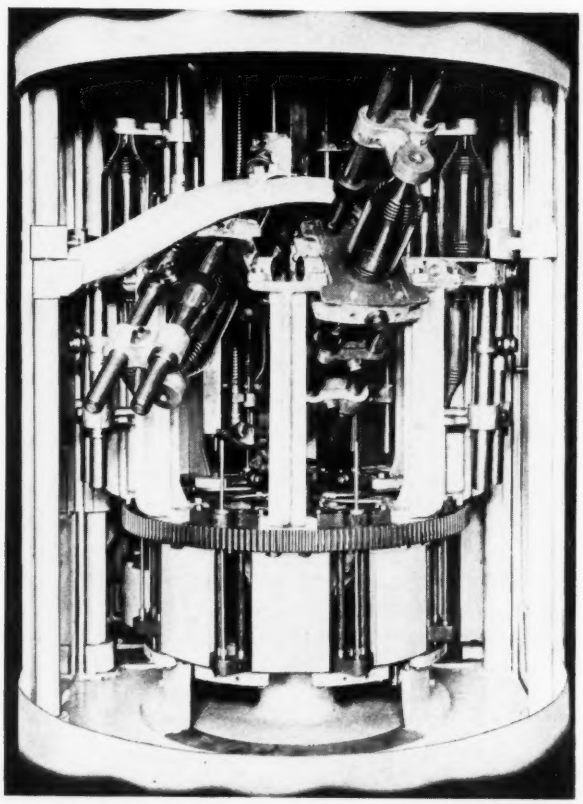
cleaning medium. The cleaning of containers is accomplished in an inverted position and all foreign materials, blasted from the insides of the containers, can be collected by an independent exhaust system.

The direction of travel of the containers within the machine, the automatic feeding of the containers, the inverting of the containers, the inserting of the cleaning tubes, the cleaning of the containers, the removal of the cleaning tubes, righting and discharging of the containers and the rotating of the complete working assembly of the machine is accomplished through the use of a continuous and constant motion in one direction. This is made possible by employing double acting cleaning stations which do away with the need for reversible cams and intermittent stop and go motions. Double acting cleaning stations permit each container to make two complete revolutions for each single revolution of the machine, thus providing for double cleaning time at normal operating speeds, variable from 40 to 150 per minute.



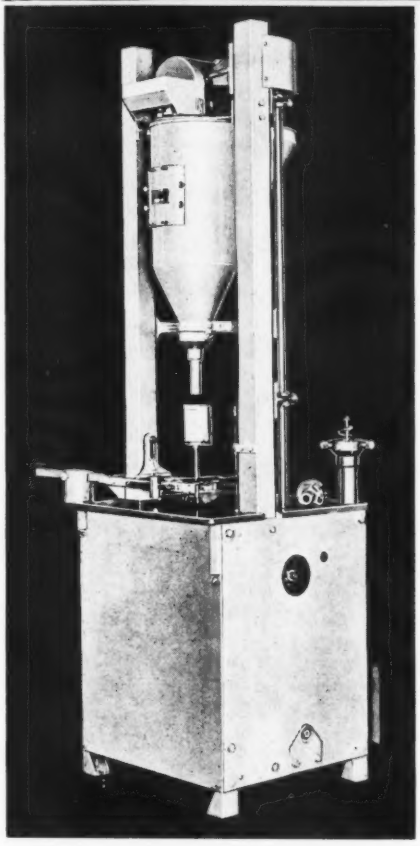


The most complicated changeover from one size container to another is said to be accomplished in less than 10 minutes. The machine is normally supplied with one set of attachments for the handling of one size container only and without feed and discharge conveyor or conveyor drive.

FOOT POWER CRIMPING PRESS

A new foot power bag closing machine, known as the Powrweld crimping press, has been developed by the Cleveland Crimping Press Co. The unit is designed to seal and crimp cellophane, diafane, maralux, laminated Pliofilm (paper or foil) and thermoplastic coated bags for heat-sealing closure. Thermoplastic heat control is said to prevent paper from scorching, insuring proper heat for sealing. The front of the crimping jaws are insulated, thus eliminating injuries to the operator. The foot pedal is placed in natural position of operator's right foot, thereby avoiding extra movements. The unit is portable and may be easily moved to any part of a plant.

"S & S" FILLING • PACKAGING • WRAPPING EQUIPMENT



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Semi-Automatic or Fully Automatic
"SPEEDS TO SUIT YOUR NEEDS"
15—30—60—120 Packages Per Minute

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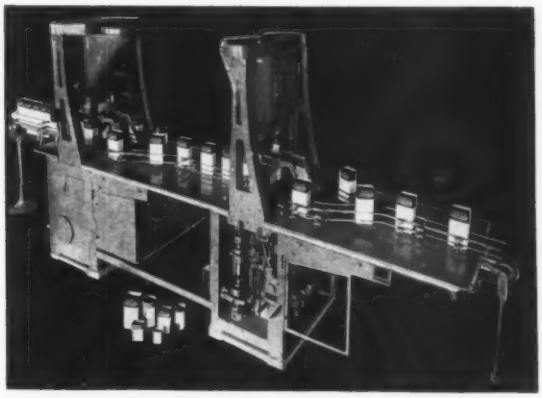
B



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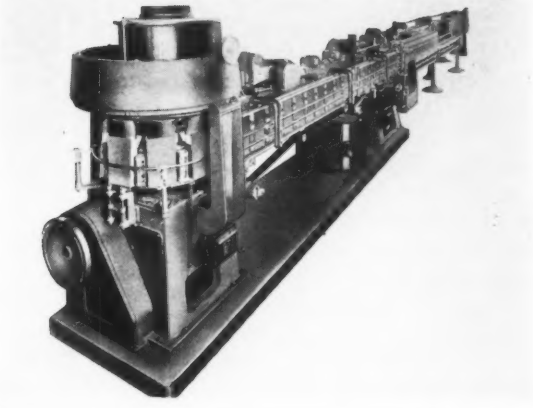

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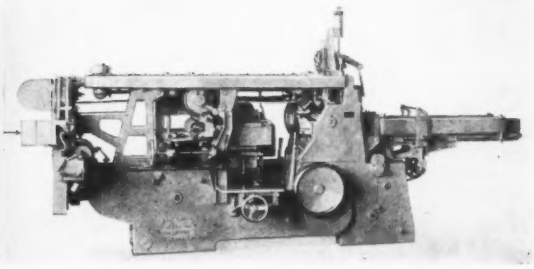

A. *UNIVERSAL FILLING MACHINE*
for Powders, Granular Products or Pastes.
15–20 Per Min.

B. *AUTOMATIC FILLING MACHINE*
Two or Four Station.
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C. *CARTON FILLING & SEALING MACHINE*
15–30–60–120 Per Min.

D. *TIGHT WRAPPING MACHINE*
15–60 Per Min.

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STREAMLINED PRESCRIPTION BOTTLE

A new type of prescription bottle, practical in design and embodying several exclusive features, has been introduced to the drug trade by the Armstrong Cork Co. This new line—known as Phenix prescription ware—consists of 20 bottles ranging from 1/2 oz. to 32 oz. in ten sizes in two styles to each size. Special features of the bottles are: A "drip-proof" pouring lip. A groove di-

rectly beneath the lip extends around almost the entire circumference, so that the spoon can fit tightly beneath it from any position, preventing dripping and facilitating pouring. Non-slip raised lines running around the bottles assure safer handling even when the bottle is wet or greasy, it is claimed. Increased label space allows more room for written directions, making it unnecessary to turn the bottle around to read the full message. The wider base of the bottle gives it a lower center of gravity and it does not tip over easily when carried on trays or placed on shelves or bedside tables. The handy compact size of the bottle fits readily on the shelves of cabinets or in purses and pockets. Illustrated here is the 4-oz. size bottle.

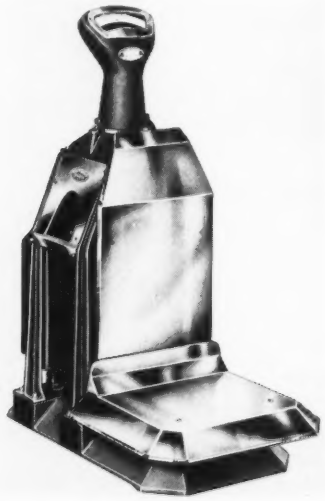
COTTAGE CHEESE CAN

The Sutherland Paper Co. has recently introduced a new type of paper can, designated as Titelok, for cottage cheese. A specially developed liner protects the cottage cheese, without the application of wax. The slip-over cover feature of the Titelok container is said to provide greater sanitation because the product is protected while the cover is being removed. Containers can be filled to top level to give full measure and, it is claimed, seepage is eliminated. The new cottage cheese can labels are printed in flat sheets and applied to the containers by a special process, assuring clear, sharp design

reproduction. The spiral seam is concealed and there is no outer coating of wax. Titelok cottage cheese cans, plain or printed, are available in 12- and 16-oz. sizes. They are also made with brown outside in 2-, 3-, 5- and 10-lb. sizes.

CHECKING AND PRODUCTION SCALE

The Exact Weight Scale Co. has announced the development of a new checking and production scale, known as the "General." It has a wide range of applications, in many different lines of industry, where predetermined weighing is necessary in a range from 40 to 150 lbs. Some of the outstanding features of the scale are: Low weighing platform, 6 1/2 in. from the floor; dial, inclined at 30 deg. angle, is 44 in. from the floor. The tower, in which the dial is housed, may be



turned in any direction for the convenience of the operator; all castings, including the lever system, are of aluminum alloys. The scale, unloaded, weighs only 130 lbs. and is of the even balance type, weighings being made against full capacity, cast iron, sealed weights. The unit is provided with a weight box, in which the weights are placed, and it is equipped with carrying handles on each side. An air dashpot controls oscillation of the indicator for varying loads. The scale is 33 1/4 in. long, 21 in. wide, 46 in. in overall height and area of weighing platform is 12 in. by 17 in.

CLEAN AIR

GLASS packers will agree that bottle cleaning effectiveness depends largely on the purity of the cleaning agent. A user* of Pneumatic's Inverted-Bottle Air Cleaner voluntarily submits the following enlightening data from an air analysis in his plant.

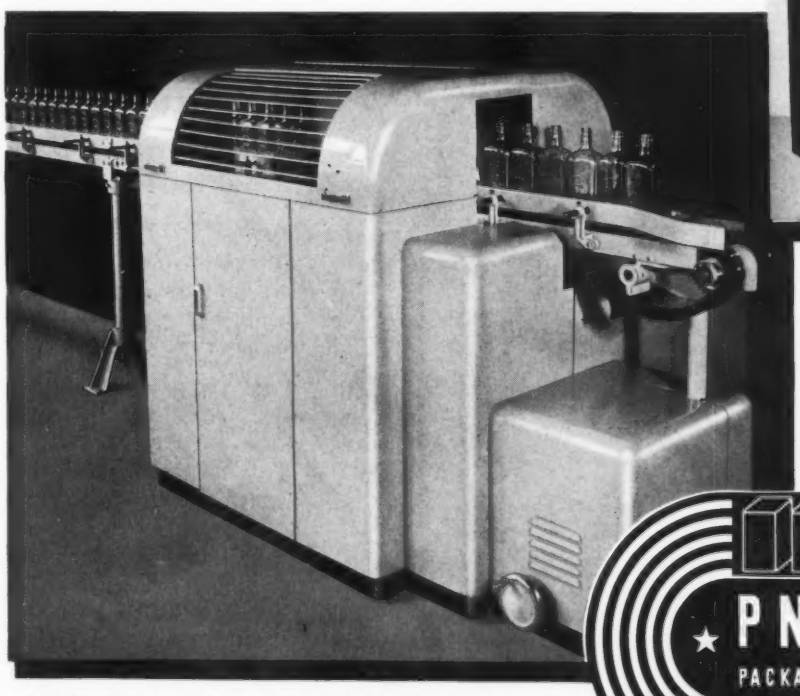
Air at the compressor intake showed a plate count of 109 micro-organisms (Petri Dish). After passing through Pneumatic's triple filter units and at point of discharge into the bottles, the plate count was 6—a 95% purification! And our customer states that the *average* bacteria removal is much higher.

Thus with practically sterile, dry air at 60 pounds pressure and with bottles upside down and stationary at the moment of blasting, Pneumatic guarantees a thorough cleaning of new glass containers. There is no opportunity here for rinsing water to introduce mineral salts, oil particles or other foreign matter to replace one form of dirt with another. Glass containers are kept dry and that eliminates wet bottle trouble in the labeling operation.

Pneumatic builds two machines for Dry Air Bottle Cleaning; both are pictured here. Details on either unit will be sent to you promptly on request.

*Name furnished on request.

Semi-automatic Air Cleaner for 20 per minute to 50 per minute cleaning of all bottle sizes.



Fully-automatic Inverted Bottle Cleaner for speeds ranging to 120 per minute and up to quart sizes.

PNEUMATIC
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71 Newport Ave., Quincy, Mass. (Norfolk Downs Station)
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For Your Information File

Unless otherwise indicated, copies of catalogs, booklets, etc., mentioned in this department may be obtained without charge by writing to the sponsoring company at the address given.

"HOW VUEPAK Helped 20 Manufacturers to Package for Greater Sales" is the title of a booklet issued by the Plastics Division of Monsanto Chemical Co., Springfield, Mass. The booklet is a collection of actual case histories of some of the products that have been successfully packaged in this rigid transparent plastic material. The complete story behind each package is told. Full information on the products, companies and markets is included. In each case, the relation of these factors to rigid transparent packaging is appraised and reasons for its adoption stated. Where available, data on comparative costs is also given. A number of illustrations, some in full color, accompany the package descriptions. The booklet has, in addition to the case histories, several pages of general information on the rigid transparent material.

THE RICHARDSON-TAYLOR-GLOBE CO., Cincinnati, Ohio, is planning to issue, each month, a folder titled "Job of the Month." Each folder will illustrate a package or display redesign, detailing a given packaging problem and its solution. Two folders in the series have already been issued.

HAZEN PAPER CO., Holyoke, Mass., has issued a swatch book, presenting samples of its Hazenkote Gloss papers for use as package coverings and labels. The papers have a gleaming gloss finish in solid smooth colors free of mottle, streaks and brush marks. The finish is durable and, it is claimed, can be readily cleaned with water as it is water-proof and rub-proof.

HAMPDEN GLAZED PAPER & CARD CO., Holyoke, Mass., has issued two swatch books, one booklet presenting samples of Popular Leather papers, the other offering samples of Porcelaine embossed papers. A wide selection of colors and patterns of the box papers are contained in each swatch book.

"THE DICTIONARY OF PAPER" (Published under the auspices and direction of the American Paper and Pulp Assn., New York, N. Y. 365 pages, index and bibliography. $5.00). To write a volume such as this in a manner that would facilitate its use by the non-technical person unacquainted with the paper industry and, at the same time, to succeed in making the volume fully acceptable to the expert is indeed a difficult task. Nonetheless, the committee of the American Paper and Pulp Assn., which prepared this volume in conjunction with The Institute of Paper Chemistry, has succeeded, to the fullest degree, in accomplishing this double aim. The entire nomenclature of the paper industry is here classified and defined in readable fashion, with adequate cross references, so that any paper user may acquire the necessary understanding of the nature of the products he uses without difficulty.

The dictionary is divided into four parts, namely, an introductory philosophy of definitions, a classification of waste materials used in the paper and board industries, a classification and definition of pulp and a large section devoted to definitions of papers, boards and paper-making terms. An adequate bibliography is likewise provided.

"ROBINSON-PATMAN GUIDE BOOK" prepared by The American Institute of Food Distribution, Inc. (143 Pages.) The Robinson-Patman law to "stop sellers from unfairly discriminating between customers" is an act simple in intent, but complex in demonstration. Manufacturers will therefore find the new Guide Book particularly useful in that it contains detailed explanations, in layman's language, of all the more important rules laid down by the Federal Trade Commission in settled and pending cases.

The volume represents one of the first attempts to chart the full meaning of the law and to codify the detailed application of the law as worked out by the Federal Trade Commission. In simple form, the book comprehensively details the "do's" and "don't's" issued by the Commission.

Among other points discussed in the Guide Book are the relative prices charged by a manufacturer for his national and private brand merchandise, the proper allocation of savings in the cost of manufacture, sale and delivery, the payment by a manufacturer for advertising and promotion work performed by a distributor, acceptance of lower price, meeting competition, functional discounts, use of the basing point pricing system, future contracts, accommodation sales and penalties under the law for violation.

"MODERN EXPORT PACKING" by Joseph Leeming, Transportation Division, Bureau of Foreign and Domestic Commerce. Trade Promotion Series—No. 207. (530 Pages. $1.00.) For sale by the Superintendent of Documents, Washington, D. C.

The present volume has been prepared by the Transportation Division to replace its previous publication, Trade Promotion Series No. 1, Packing for Foreign Markets, published in 1924. Since that date, numerous

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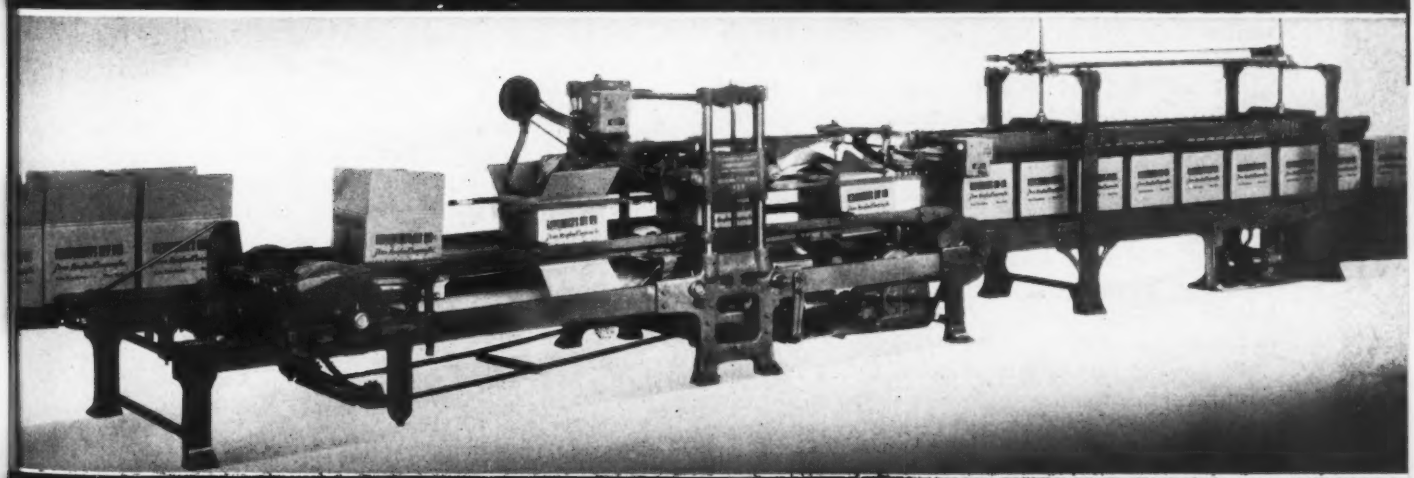

STANDARD-KNAPP CORPORATION

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Windsor House, Victoria Street, LONDON, ENGLAND

developments have taken place in the export packing field. Wooden containers have been made both lighter and stronger; solid and corrugated fiberboard cartons and also cleated plywood boxes have been greatly improved and adapted to numerous commodities; new interior packing methods have been introduced for protecting articles of many kinds, ranging from fragile glassware to large enameled products, such as refrigerators and stoves and ranges.

For many years the Department of Commerce has stressed the importance of adequate and satisfactory packing of American merchandise for export. It has emphasized the point that it is an economic waste to spend time and money to design, manufacture and package a product if, through lack of attention to proper packing, that article is later damaged or rendered completely useless or unsalable during transportation to its foreign destination. For these and other reasons, packing is one of the most fundamental factors to be considered in connection with the problem of extending and maintaining our important oversea markets.

The construction of boxes and crates is given considerable space in this publication. To the inexperienced exporter, this may seem unnecessary, but investigation of export packing practices and the numerous requests for specific information concerning container construction received by the Department of Commerce indicate that this material is in constant demand by companies in every part of the country engaged in the most diverse types of enterprise.

The volume consists of three principal sections devoted, respectively, to the construction of containers, to packing methods for commodity groups and to vital considerations affecting satisfactory packing. The construction section deals with nailed wooden boxes, crates, plywood boxes, fiberboard containers, wirebound wooden boxes, bales and baling, wooden barrels and metal barrels and drums. Thirty-three separate commodity groups are treated in detail in the second section of the volume, ranging from abrasives to weighing apparatus and including such diverse export items as aircraft, chemicals, billiard tables, dolls, electrical machinery, pottery, gasoline pumps, textiles and tobacco products.

Of particular interest to export traffic managers is the section dealing with packing for lowest customs charges. Packagers engaged in both the domestic and the export trade will find much information of great value in the various sections on the construction of containers, on interior packing, on pilferage protection and on rust and rust preventatives.

An appendix contains a complete listing of ports throughout the world with detailed information as to conditions and facilities at every port.

Readers of the present volume will find additional information on export shipping procedure in the publications on "Preparing Shipments" that have been issued in recent years by the Bureau of Foreign and Domestic Commerce. These discuss such matters as labeling and marking; preparation of documents; considerations affecting duties and drawbacks; import prohibitions and restrictions; customs entry and clearance; warehousing of goods; weights and measures; samples and advertising matter. The significant publications in this specific field include:

Preparing Shipments to British Countries (Except Canada): Documentary Requirements and Customs Regulations. Revision. Trade Promotion Series No. 154. 1939 edition. 1939. 222 pages. Price, 25 cents.

Preparing Shipments to Canada: Documentation and Customs Entry. Second revision. Trade Promotion Series No. 91. 1936. 44 pages. Price, 10 cents.

Preparing Shipments to Europe. Trade Promotion Series No. 158. 1935. 159 pages. Price, 15 cents.

Preparing Shipments to Cuba. Trade Promotion Series No. 163. 1935. 30 pages. Price, 10 cents.

"WRAPPING SUPPLY MANUAL" (Published by the Store Management Group of the National Retail Dry Goods Assn., New York, N. Y. $2.50). Supplementing the movement to bring about standardization and simplification in the field of store wrapping supplies, this publication is impressive because of its broad scope and the potential savings in store expense to which it points the way. The manual presents standard sizes and specifications for paper bags, set-up boxes, folding cartons and corrugated containers and standard specifications for corrugated rolls. Representing cooperative efforts of supply manufacturers and retailers with the assistance of the National Bureau of Standards of the Department of Commerce, the supply standards have been adopted as official N.R.D.G.A. standards and, with equal acceptance by supply manufacturers, it is reported that they will become standards of the Federal agency as well.

In addition to the new standards, the manual endeavors to enlist continuous support of stores in the project by furnishing essential material and construction specifications for each size, a model specification sheet for each type of supply, detailed listing of the multiple merchandise uses of all four items of supply, suggestions for purchase and control of supply and a presentation of methods for putting the program to work in each store. The manual has been printed loose-leaf to permit the substitution of reviewed standards and specifications whenever experience makes it proper to bring them up to date.

BRUNT & CO. has issued a brochure describing its facilities for the development and manufacture of specially constructed as well as standard types of corugated containers.

"PRESSROOM DOPES" is the title of a bulletin issued by E. J. Kelly Co., Kalamazoo, Mich. It is the purpose of the bulletin to help printers to cope more successfully with the problems of doping inks and knowing how or when to adjust inks to meet unusual conditions.

STANDARDIZED MATERIALS INDEX

S. 907

Simplified Practice Recommendations

With the cooperation of the National Bureau of Standards of the U. S. Department of Commerce, Modern Packaging will hereafter incorporate—from time to time—data taken from simplified practice recommendations, as issued by the Division of Simplified Practice of the Bureau of Standards, in such cases as apply directly to packaging. Others appear on cards S. 902, S. 903, S. 904, S. 905 and S. 906

S. 908

Simplified Practice Recommendation for Corrugated Fibreboard Boxes for Department Stores

Box No.	SIZE, IN INCHES			Box No.	SIZE, IN INCHES		
	Length	Width	Depth		Length	Width	Depth
1	5	4	4	36	19	12	3
2	6	6	5	37	19	19	12
3	6¼	4½	13½	38	20	8	8
4	7	7	7	39	20	12	12
5	7	7	12	40	20	15	15
6	8	6	4	41	20	20	14
7	8	8	7	42	22	8	8
8	9	9	9	43	22	12	12
9	10	8	8	44	22	18	8
10	10	10	24	45	22	22	12
11	10⅝	10⅝	7⅝	46	23	12	3

Continued on card S. 909

S. 909

(See also S. 908)

Simplified Practice Recommendation for Corrugated Fibreboard Boxes for Department Stores

Box No.	SIZE, IN INCHES			Box No.	SIZE, IN INCHES		
	Length	Width	Depth		Length	Width	Depth
12	11	8	6	47	24	8	8
13	11	8	11	48	24	12	12
14	12	10	8	49	24	14	4
15	12	12	6	50	25	15	5
16	12	12	9	51	26	10	8
17	12	12	12	52	26	12	12
18	12	12	60	53	27	5	3
19	12⅝	12⅝	7⅝	54	28	12	12
20	14	12	10	55	29	10	8
21	14	14	10	56	30	12	12
22	14⅝	14⅝	5⅛	57	36	5	3
23	14⅝	14⅝	8⅛	58	46	6	5
24	15	8	8				
25	15	15	9				

Continued on card S. 910

S. 910

(See also S. 909)

Simplified Practice Recommendation for Corrugated Fibreboard Boxes for Department Stores

Box No.	SIZE, IN INCHES			Box No.	MATTRESS BOXES		
	Length	Width	Depth		Length	Width	Depth
26	15	15	12	59	74	39	7¾
27	16	12	9	60	74	48	7¾
28	16	12	11	61	74	54	7¾
29	16	16	10				
30	16	16	12				
31	16⅝	16⅝	8⅝				
32	17	17	11				
33	18	12	12				
34	18	18	12				
35	18⅝	18⅝	8⅝				

S. 911

Simplified Practice Recommendation for One-Piece Five-Panel Folders for Department Stores

Box No.	SIZE, IN INCHES			LIGHTER TYPE		HEAVIER TYPE		Number of Complete Boxes to a Bundle
	Length	Width	Depth	Caliper	Weight per M Boxes (pounds)	Caliper	Weight per M Boxes (pounds)	
1	6	4	1¾	.024	75	.026	80	200
2	6	4	3	.024	120	.026	130	200
3	7½	5¼	2¾	.026	160	.028	170	200
4	8½	6½	1½	.026	128	.028	135	200
5	9	6	2	.026	149	.028	158	200
6	9	6	3	.026	200	.028	212	100

S. 912

Simplified Practice Recommendation for Lock-Corner and Automatic Folding Boxes for Department Stores

Box No.	Size, in Inches			Lock—Corner Style				Automatic Style		No. of Complete Boxes to a Bundle	
				Lighter Type		Heavier Type		Lighter Type			
	Length	Width	Depth	Caliper	Weight per M Boxes (lbs.)[1]	Caliper	Weight per M Boxes (lbs.)[1]	Caliper	Weight per M Boxes (lbs.)[1]	Lock-Corner Style	Automatic Style
7	10	10	2			.024	295	.028	335	100	100
8	12	10	2			.024	305	.028	385	100	100
9	15	11	2			.024	360	.028	485	100	50
10	17	11	2½	.024	440	.028	500	.030	600	100	50
11	19	12	3	.026	610	.030	670	.030	720	100	50
12	22½	16½	2	.032	850	.036	935	.03[illegible]	1080	50	25
13	23	12	3	.028	750	.032	840	.035	180	50	25
14	23	12	3½	.030	835	.032	920	.03[illegible]	1050	50	25
15	24	14	4	.030	1060	.032	1140	.038	1400	50	25
16	26	15	5	.033	1480	.038	1700	.038	1800	50	25
17	30	16	6	.038	1580	.038	2165	.038	2510	50	25

[1] These weights are based on two-piece boxes with two 60-pound kraft wrappings. Weights of one-piece boxes will average approximately 8% less.

RESEARCH DEPARTMENT
MODERN PACKAGING
CHANIN BUILDING, 122 E. 42nd ST., NEW YORK, N. Y.

Please send me information as to sources of supply of items Nos.

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as shown in your Standardized Materials Index.

Name.....

Address.....

RESEARCH DEPARTMENT
MODERN PACKAGING
CHANIN BUILDING, 122 E. 42nd ST., NEW YORK, N. Y.

Please send me information as to sources of supply of items Nos.

....

....

as shown in your Standardized Materials Index.

Name.....

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Bullseyes!

WITH MILPRINT COMBINATION CARTONS *and* COUNTER DISPLAYS

General Cigar specimen is a patented MILPRINT "Sleeve Display Carton"... the cover becomes the supporting easel when set in display position.

This Gift Ribbon specimen is a patented MILPRINT "Tilt Display Carton"... prize winner in a national competition.

Let these patented Milprint display cartons go to work for YOU. Economical... compact... serving the twin function of container and counter display ...they have proven ability to win valuable counter space and SELL merchandise. Milprint carton creations like these are adaptable to countless products. Our staff of carton engineers and creative advertising specialists can develop a display carton or counter display suited to your individual needs and requirements. Let us show you that we have the experience and ability to hit the bull's eye in solving your packaging and display problems!

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...NTS IN MILWAUKEE, PHILADELPHIA, LOS ANGELES... REPRESENTATIVES IN PRINCIPAL CITIES

famous MILPRINT PRODUCTS

SCULPTURED FOLDING BOXES

(*Continued from page 49*)

business, has gone practically unimproved in form since its inception.

The countless attempts made to devise more novel folding boxes were based on artistic conception rather than scientific application and therefore seldom got beyond the drawing-board stage of development. Designing a folding box is no artistic problem. It is one for a packaging engineer who knows every phase of the problem from the sales appeal to the setting up, from the production line to the shipping carton.

The discovery of Compensated Scoring is a story of cardboard engineering, a natural outgrowth of the research that was conducted to broaden the field of display design. Before this development, it was thought that an irregular score line could not be folded. The Sculptured box came into the realm of practical possibilities with the conception of matched pairs of irregular score lines which could compensate for each other's irregularities, thereby permitting them to fold.

The original discovery was primarily a geometric principle, only incidentally the means of making a box. Started as a series of beautiful shapes, they gradually became set-up boxes. The collapsible feature, devised by Marshall I. Williamson, made them practical for standard folding and gluing machinery.

When one examines the boxes we have today, one finds them all oblong or square, with an occasional hexagonal variation, and an even rarer triangular one. All have straight walls. One begins to appreciate the point of view that most of the beauty in today's boxes is confined to art work—the box itself having little charm of line to recommend it.

The Sculptured box opens a new and exciting field to the designer, a newer type of sales appeal to the manufacturer. There is little doubt that the possibilities are broad, but a word of caution must be offered here to prevent disappointing results. The several types shown on these pages are just a few of the almost infinite variety that are possible. The needs of the customer's product should be allowed to shape a Sculptured box just as the display needs of those very same products shaped the course of progress taken by the new principles of display construction.

The forms of the boxes must not be dictated by mere artistic whim. True, boxes should be attractive to look at, but equally important is the factory procedure taken by the box in its trip from the operators who set them up to the dealer who must stack them on his shelves. It becomes evident that a designer must know automatic packaging processes thoroughly before he can design practical variations for any product. The questions arise: Is the box for a product weighed and packed automatically? Is it a factory set-up—a dealer set-up—are there corrugated partitions to be used in the regular shipping cartons? Each answer shapes the requirements of your design. A carton of wavy contour is easy to make, but impractical to use for a cigarette production line. That same box, however, used for a package of fine bath soap or some other product packed by hand, would be entirely satisfactory.

The designer must consider the requirements of each product paramount, down to the shipping, stacking and mass appearance on dealers' shelves. A heavy liquor bottle requires a simple, sturdy carton, while soap flakes could reenforce a more elaborate shape. Light, loose products, such as cereals, pop-corn, potato chips, tea, candies, etc., could be accommodated in an almost endless number of refreshing new forms. If corrugated cartons have no partitions, the designer must provide enough flat surfaces on each box to allow them to rest on one another in the shipping container. As the panels of each Sculptured box are alternately concave and convex, many tricky interlocking arrangements will present themselves.

From the artistic point of view, these new and beautiful forms should be allowed to create a gem-like appearance by the lights and shadows on the many facets of its own form. Attempts to "draw in" lights and shadows or break up its surfaces with different colors in each panel, will do more to conceal the form than enhance it. If metallic foils are used, dull or mat finish foils will be found superior to bright ones, for the shiny surfaces often confuse the definition of line that makes these boxes so attractive. Don't gild the lily.

The angles and curves strengthen light materials. Many exotic forms appropriate to cosmetics and perfumes, have a dainty and feminine appearance which belies their rigidity. These boxes are erected in the same manner as any other box, and with as little effort. They cost no more to make, require no special machinery, and are handled from start to finish like any other folding box. In the hands of our many able industrial designers they may provide the new yardstick by which we shall some day measure our progress in packaging.

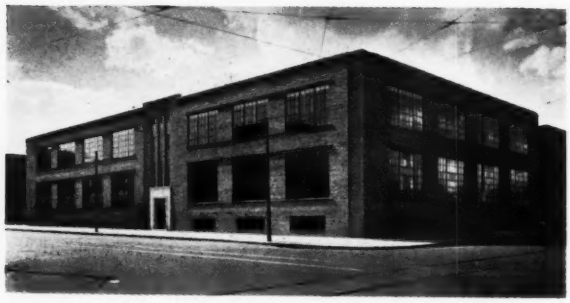
PACKAGE HALVES CONSUMER COSTS

(*Continued from page 72*)

The King-Fuller Co. is utilizing a similar package, in a 6-package carton containing cocktail items—cherries, olives, etc.—for distribution through retail liquor stores. Both types of products are likewise being marketed to assemblers of gift assortments sold through grocery, delicatessen and department stores.

Credit: Transparent packages fabricated by Shellmar Products Co. Transparent sheeting material, Pliofilm, manufactured by The Goodyear Tire & Rubber Co., Inc. Corrugated shipping container manufactured by Waldorf Paper Products Co.

Plants and Personalities



THE NATIONAL COLOR PRINTING CO., INC., Baltimore, Md., has announced the completion of a new addition to its building. The new quarters accommodates a cutting room, art department and offices.

FRED L. McCARTY has been named the new president of the Champlain Corp., Garfield, N. J. Thomas Meloy, president of Champlain for several years, resigned that office recently to become consultant for the company.

BAKER GRAVURE CO., INC., New York, N. Y., has established a sales office at 933 Philadelphia Savings Fund Building, Philadelphia, Pa. The new office will be under the direction of Trevett R. Moore.

ARTHUR E. RAYMOND, formerly associated with the H. D. Catty Corp., has joined the New York sales force of Milprint, Inc., with offices located at 420 Lexington Avenue.

HARRY L. HUDSON, president of The H. L. Hudson Co., Brooklyn, N. Y., died at the age of 73. The management of his business is continued by his son-in-law, John E. Skirrow.

HOWARD M. HUBBARD has resigned his position as secretary-treasurer of the Harris-Seybold-Potter Co., Cleveland, Ohio, to become president and general manager of the Greenfield Tap & Die Corp.

P. C. DOYLE of Ferdinand Gutmann & Co., died August 17.

CONTAINER CORP. OF AMERICA has announced the completion of its new Texas manufacturing division at 2617 W. Seventh St., Ft. Worth. The plant has facilities for making both folding cartons and corrugated shipping containers. Manufacturing and sales under the direction of J. R. Neil.

ARTHUR H. AXBERG, Eastern representative for the Johnson Automatic Sealer Co. and the Battle Creek Bread Wrapping Machine Co., has moved his offices to 50 Church Street, New York, N. Y.

THE PRINTAPE CO. is now located at 41 Union Square, New York, N. Y.

JOSE MUNDET, founder of the Mundet Cork Corp., Brooklyn, N. Y., died August 7. About five years ago, Jose Mundet retired from active management of his firm and was succeeded as president by his son, Joseph Mundet, Jr., who will continue to direct the affairs of the company.

GENERAL LAMINATING, INC., Lyndhurst, N. J., has opened a New York office at 62 West 45th Street.

STUART MOORE, vice president of the Dixie Wax Paper Co., Dallas, Texas, died August 6.

PHILIP KENNETH KEENAN, president of the Amsco Packaging Machinery Co., Long Island City, N. Y., died September 10 at the age of 41.

IVEL CORP., New York, N. Y., has announced the appointment of R. L. Wintersteen as vice president in charge of the company's Eastern Great Lakes Division.

CHARLES L. DRUM, Chicago branch manager of Owens-Illinois Glass Co., has been promoted to the position of western sales manager of the company.

THE LIGHTER-WEIGHT TREND in glass containers is demonstrated in an exhibit arranged in the lobby of the Department of Commerce Building, Washington, D. C. Twenty-two sets of representative standardized bottles which have been redesigned in the last few years to attain lighter weight have been chosen to illustrate the trend. Each set contrasts the weights of an old style bottle and a redesigned bottle and several sets include a third and still more recent design. The exhibit was arranged by the Specialties Division, Department of Commerce, in cooperation with the Glass Container Assn. of America.

IN A STORY—page 75 of the September issue of Modern Packaging—describing a group of plastic displays for the G. Washington Refining Co., I. Miller, Johnson & Johnson, Schenley Distillers Corp. and Christian Feigenspan Brewing Corp., credit was omitted. The article failed to state that the displays were designed and fabricated by the George Rutledge Co.

TESTING DISPLAY EFFECTIVENESS

(*Continued from page 79*)

Test 9

Where conducted: Not specified.

Product: Not specified.

Test sample: One certain window in a town of 35,000.

Method: Window display subjected to a daily traffic count for one week and results compared with the circulation coverage of an unspecified publication of the town.

Results: One week traffic past window—94,390 persons. Passengers who "looked" at display—9,812 persons. Publication circulation—1,184 copies. Display cost delivered to store—$1.85. Publication circulation cost per M—$3.50. Discounting window "lookers" 50 per cent, the display cost $1.85 for 4,906 known lookers compared to publication cost of $4.14 for 1,184 known circulation.

Reference source: Window Display Advertising Assn. Proceedings, 1926. Carl Percy address, pp. 12–13.

Chart correlation: 1b, 2a–c, 3a, 4a, 5a–c–d, 6 (attracted 10 per cent of traffic. Cost of display—"lookers only"—10.8 per cent of cost of magazine coverage per M).

Test 10

Where conducted: In drug stores.

Test: Seven day traffic count.

Test sample: (a) Vassar Pharmacy, Poughkeepsie, N. Y. and (b) Hodge's Pharmacy, Plainfield, N. J. Tested May 15, 1925 to May 23, 1925. Poughkeepsie population, 35,670. Plainfield population, 31,748.

Method: Two tabulations were made—passers-by and those who looked at the displays.

Results:

	Passers-by	Lookers	Per cent
Point a	79,250	7,987	10.0
Point b	27,936	5,504	20.0
Total count	107,186	13,491	12.5

Reference source: "Window Display Advertising" by Carl Percy. Chapter III. Circulation Value. John Day, 1928.

Chart correlation: 1b, 2a, 3a, 4a, 5c, 6 (average of 12.5 per cent of traffic attracted).

TO BE SEEN IS TO BE SOLD

when the containers are

HYCOLOID and CLEARSITE

Package your products in modern containers individually designed for *your* merchandise.

Any color or color combination you wish . . . opaque or transparent. Wide choice of shapes including square and hexagon. Best of all, they are

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80% LIGHTER THAN GLASS

Our packaging experts will gladly confer with responsible firms who have packaging problems. No obligation, of course.

CELLUPLASTIC CORPORATION

Formerly Hygienic Tube & Container Corporation

Executive Offices and Factory
46 Avenue L-Newark, N. J. Market 2-4544

FIRST IN CELLUPLASTICS HYCOLOID - CLEARSITE

New York Display Office
626 Fifth Ave.
New York City

Test 11

Where conducted: In auto supply stores.

Product: Spark plugs.

Test sample: 10 stores.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales, 72 plugs. Three weeks with display—sales, 125 plugs. Increase achieved by display—74 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 74 per cent).

Test 12

Where conducted: In haberdashers' stores.

Product: Men's garters.

Test sample: 14 stores.

Method: Comparing sales without and with display on counters during equal periods of time.

Results: Three weeks without display—sales, 249 pairs. Three weeks with display—sales, 581 pairs. Increase achieved by display—233 per cent.

Reference source: "Window and Store Display" by A. T. Fisher. Chapter XIV. Doubleday Page & Co. 1921.

Chart correlation: 1a, 2f, 3b, 4a, 5b, 6 (sales increase 233 per cent).

THE FIFTH PLASTICS COMPETITION

(*Continued from page 47*)

---

was likewise accorded an honorable mention. Formerly made of glass with metal or wood base, the change into sparkling transparent plastics is not only a change toward beauty, but toward practicality as well. Since the unit has been modernized, the company has found it possible to place it into the most desirable shops. Breakage has been reduced and shipping costs are substantially lowered by the reduction in weight of the new unit as compared with the old. Cast resin material supplied by Röhm & Haas Co., Inc. Fabrication by Cyrille Steiner Studios.

Two top awards went to displays in the decorators' accessories category of the Competition. Forms for lighted and unlighted displays, manufactured by the J. M. Gordon Co., Inc., are fabricated of unusually deep-drawn sheets of acetate material (Fig. 1). Flat sheets of the plastic are heated and pressed into shape. Fish, wild geese and a large ball intended for a Christmas tree ornament are among the items entered in the Competition. Cellulose acetate sheeting by the Celluloid Corp.

The second top award in the decorators' accessories classification went to Elizabeth Arden for an advertising display designed to stimulate the sale of cosmetics suitable for summer use (Fig. 2). Designed by Clarissa Gross, the display features three bears, each a separate unit fabricated in such a way as to support a jar of cream. Frosted sheets of acrylic resin are utilized and an air of femininity is achieved by covering each of the pieces with white lace. Acrylic resin material by Röhm & Haas Co., Inc. Fabrication by Croasdale and De Angelis.

Honorable mention was awarded to a group of bas-relief plaques executed in cast phenolic by W. L. Stensgaard & Associates (Fig. 6). Set flush in opaque panels, these translucent plaques were made from original designs created by Robert Rinehart Von Liski and original carvings by Carl Halsthammer. Measuring $11\frac{1}{2}$ in. square and about $\frac{5}{8}$ in. deep, the plaques are ideal for use as decorative motifs in all types of display and store decoration. The architectural and interior designing professions will undoubtedly find these plaques ideal for both commercial and residential interiors, particularly in remodelling jobs where inexpensive but smart, contemporary effects are desired.

The phenolic plastic is cast in special rubber molds and, although animal and bird designs are the motifs of the Competition entries, almost any design or motif can be obtained. This variety and individualized treatment is another factor that appeals to architects and interior designers who believe in personalized interiors. Cast phenolic resin by Catalin Corp. and Plastics Division of the Monsanto Chemical Co.

Transparent plastic sheets were used to fabricate two display groups designed by Malvina Matthews for the Frank Maxwell Co. One, a sophisticated lady with hands outstretched for holding cosmetics (Fig. 7), utilizes small pieces of cast resin to provide decorative detail. The second, known as the "Snoody Twins" (Fig. 8) consists of two figures, a boy and girl, having puffed cheeks, pigtails and a wide-eyed look. These are designed for the display of children's wearing accessories. Transparent sheet material by Röhm & Haas Co., Inc. Cast resin details by Catalin Corp. Fabrication by Heiberg Mfg. Co.

A new type of sign letter, injection molded of transparent plastic, received honorable mention in the lighting group (Fig. 5). Sponsored by Colorvision Ads, Inc., the letters are brilliantly clear and geometrically exact. The prize-winning series measures 2 in. high, $\frac{3}{4}$ in. thick with a $\frac{1}{4}$ in. stroke. Some 3-in. and $4\frac{1}{2}$-in. letters will be offered in the near future.

The letters are mounted in bronze metal stencils which exactly fit the shape of each individual letter.

REPRESENTATIVE WANTED

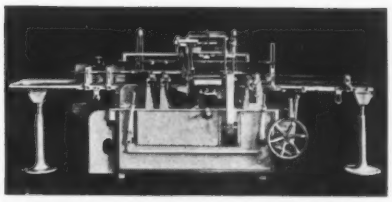
WE WANT an experienced and capable man to handle the New York City sales of the best established general line of Embossed Seals and Labels and Printed Labels on a commission basis. We want a man under fifty, with a wide acquaintance who will give all his time to this job and who will make a science and a business of selling it. The business is capable of yielding $4000 to $15,000 yearly to such a man. This is an old established business, highly rated, and we must have a man of highest type, who can stand investigation. Previous experience, ability and enterprise are prime requisites. A wide acquaintanceship in the New York City territory is highly essential.

BOX No. 119

MODERN PACKAGING

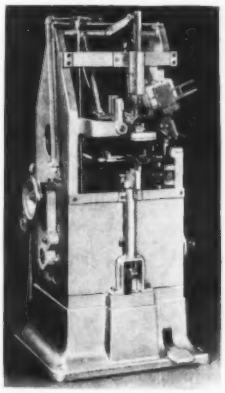
122 East 42nd Street ♦ New York City

WHICH IS *Your* WORLD?



Bulletin D-7 has the whole story on the Model HS WORLD Automatic Straightaway Labeler. May we send you a copy?

FROM the WORLD'S most complete line of Automatic and Semi-Automatic Labelers these two stand out as WORLD'S finest for a broad variety of *modern packaging* requirements.



The Model HS WORLD Automatic Straightaway Labeler meets quantity production schedules on round, square, flat, oval or panel bottles, flasks or other containers. It applies front or front and back labels.

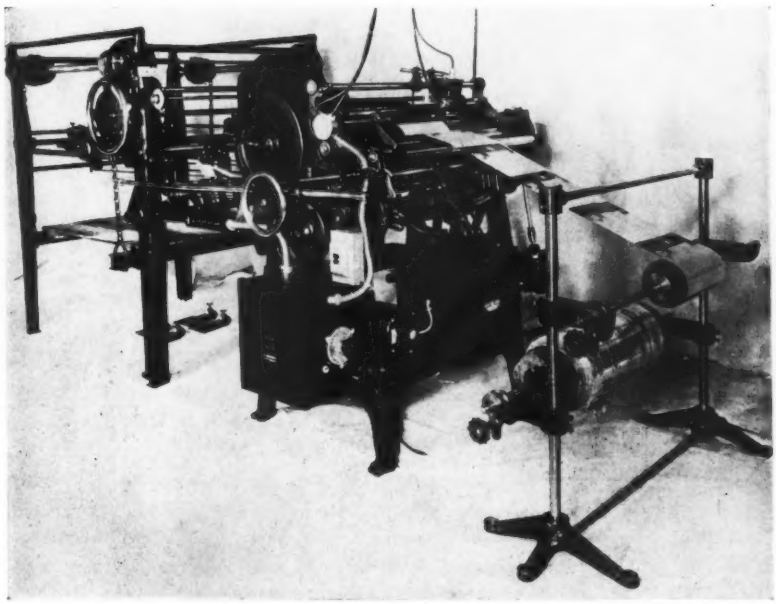
The Model CH WORLD Semi-Automatic Labeler applies single labels to any type of container from ampoules up to 4" in diameter. Label sizes range from ¾ of an inch to 6½ inches square.

For complete specifications and quotations simply send us samples of your labeled containers.

Bulletin CH-7 contains complete information on this Model CH WORLD Semi-Automatic Labeler. Write for it.

ECONOMIC MACHINERY CO.
WORCESTER - - - MASSACHUSETTS

ELECTRIC-EYE MEANS CONSTANT VIGILANCE



COMPLETELY ELIMINATING THE HUMAN EQUATION AND AFFORDING MORE DEPENDABLE ACCURACIES IN "SPOT SHEETING" WORK THAN WHEN HUMANLY CONTROLLED

BECK Automatic SHEETERS with ELECTRIC-EYE Controlled DIFFERENTIAL & Automatic Lowering Table SHEET PILER

are now the accepted standard in sheeting equipment, and are both recognized and endorsed as such and used by many of the largest packaging, printing and converting houses throughout the country. To those concerns who are seeking a really dependable media for "spot sheeting" work we offer the combined services of our engineering and research staffs, in solving the most difficult of your sheeting problems.

Send for Data Today

CHARLES BECK MACHINE COMPANY

13th & Callowhill Streets Philadelphia, Pa.

Any number of letters may be assembled to form any desired legend. A fluorescent tube in the desired color is located behind the bronze stencils and illuminates the letters, providing a steady, unflickering light.

These letters have the peculiar property of appearing larger than they are due to the fact that the aura emanating from a fluorescent tube seems to extend beyond the border line of the letter. For example, at a distance of 150 ft., 3-in. letters appear to be at least 5 in. in height. The letters are interchangeable and can be substituted one for another easily and quickly. This makes them ideal for use in theater signs, department stores, night clubs and wherever changeable applications are needed.

Signs using these letters are considered to be more attractive than the neon type because of the fact that there are no crossovers at the junction points where the neon tube leads from one letter to another. The signs with the plastic letters are said to be lower in initial cost as well as maintenance and operation cost. These letters are rigid, durable and can stand a great deal of abuse. Transparent molding material by Röhm & Haas Co., Inc., and E. I. du Pont de Nemours & Co., Inc. Letters molded by Tech-Art Plastics Co.

IRREGULAR PRODUCT AUTOMATICALLY WRAPPED

(*Continued from page 90*)

the packer with empty cartons and returns the full cartons to the inspection department.

The Williamson Candy Co. uses high-gloss ink on a glassine outer wrap and a plain white opaque inner liner with a chocolate-colored card beneath the bar. This combination provides a very substantial package which has the advantage of being fairly uniform in size and shape, despite slight irregularities in the shape of the candy bar. The new wrap has thus made it possible to secure bars which can be stacked on the dealer's display cases—a considerable advantage in securing better display for the product.

The wrappers are printed in rolls and registration of the printed matter is attained through the use of an electric eye attachment regulating the cutters and the feed mechanism of the wrapping machine. The wrap has a spot printed on its side in proper relation to the printer matter. It is fed through the cutters at a constant speed and the operation of the electronic regulators depends upon the position of the paper rather than upon the speed with which the paper is fed. The spot causes an electrical impulse which is recorded by a photo-cell scanner and then transmitted to a control panel. Here various mechanisms are actuated which, if necessary, momentarily decrease the rate at which the paper is being fed so as to put the wrappers in proper register with the cutter. This form of control is reported to be particularly effective where the wrapper problem is complicated by irregularity of the object being wrapped.

Production with the present equipment is reported to exceed over a million bars per day, with each single machine wrapping from 50,000 to 75,000 individual bars. Paper costs, since the introduction of the new equipment, are reported to be cut approximately 35 per cent by the Williamson plant.

Credit: Wrapping machine designed and manufactured by the Modern Equipment Corp. Electronic regulators by the Westinghouse Electric & Mfg. Co.

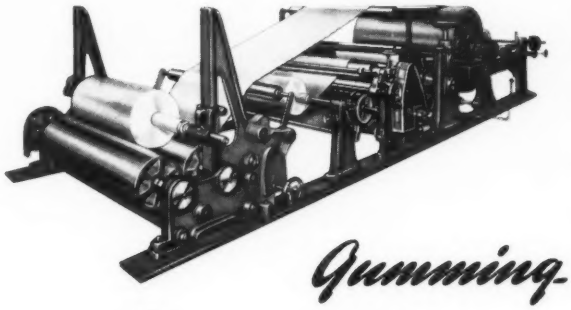
TIN OR GLASS WITH EQUAL EASE

(*Continued from page 89*)

The crowner discharges onto a short section of conveyor which carries the bottles into a cataract pasteurizer. Inasmuch as the bottles are filled hot, this unit has no preheating section but merely serves as a holding chamber and cooling leg. The bottles are held at pasteurizing temperature for a carefully controlled period and then are subjected to successively cooler sprays so that they are discharged at the optimum temperature for labeling. The cross-feed discharge conveyor of the pasteurizer brings the bottles directly onto the conveyors feeding two automatic labelers and one semi-automatic labeler. By the installation of dividers in this conveyor line, it is possible for the operator to supply bottles to all three labeling units, or any one of them, at any time. This installation has proved especially successful in the handling of special labels and small lot orders at the same time that the major portion of the product is being packed for large orders. The two automatic labelers are set in a hollow square in such a way as to make it possible for one man to tend both machines.

The labeled bottles are discharged onto a pack-off table where they are replaced in the cartons by hand and sent to the sealing department. These are the same cartons in which the bottles were received at the plant with the exception that the brand name and the name of the distributor have been imprinted on the end of the case by a cannery printer. In the sealing department, the cases are automatically glued and sealed and at the same time the full cases are counted and stamped with a code number for identification. This numbering device is an integral part of the case sealer.

The full cases pass through the sealing department onto a conveyor system which carries the case through the finished product warehouse and then to the rear of the plant where two loading stations are located. At each one of these stations, empty cars may be spotted three deep so that it is possible to load six cars at once, either directly from the bottle shop or from the warehouse. When trucks are loaded, the cases are usually handled on roller conveyor through the empty



Gumming

AND *Laminating* MACHINE

Our No. GL-2 will provide box makers and convertors with an ideal piece of equipment for either gumming or laminating. Laminates glassine, paper or cellophane to boards or papers using hot or cold adhesives or wax combinations. Perfect adhesion and perfect finish.

HUDSON-SHARP

MACHINE CO • GREEN BAY • WIS

LACQUER
VARNISH and GUM
and WAX COATING for

Labels
Wraps
Posters
Displays

and other printed matter

Boxmakers, printers, as well as package users come to Lowery and Schwartz for a superior paper coating service. Lowery and Schwartz have the efficient, specialized machinery, the long experience, and the skill that assures high quality, prompt delivery and low cost.

LOWERY and SCHWARTZ
20 Van Dam St., New York City
CAnal 6-7703

Back of
"Brand Preference"
there's
"Package Preference"

SHE orders by brand name but she actually means: "The bread in the soft, fresh-feeling wrapper. The cheese in the transparent package which keeps it so tasty. The Crackers that are always crisp. Butter in that protective carton (the wax never rubs off!). Soap which is sealed in a wrapper to keep it fresh and quick-acting. Cookies in the box which is both moistureproof and greaseproof. The ice cream in the easy-opening carton which fits my refrigerator tray." Convenience, cleanliness, protective properties — these are basic factors in consumer choice and they are fundamentals of these and every MENASHA food-packaging development.

Menasha's Service Combines Technical facts with Practical facts

Technical knowledge in the science of pulp and paper making and paper treatments — practical knowledge in machine packaging, shipping, marketing and merchandising of foods—this is the MENASHA combination responsible for a quarter century of leadership in food packaging. It is available for study of your particular package problem, without obligation of course.

THE MENASHA PRODUCTS CO.
DIVISION OF MARATHON PAPER MILLS CO.
Menasha, Wisconsin
Branch Offices in Principal Cities

Menasha's Precision Papers for Precision Packaging

cars. In order to tabulate the number of cases loaded, case counters are mounted at each loading station.

When the juice is packed in cans, the general flow of materials is identical with that in the case of glass, except that after the cans have been cleaned in the bottle shop and counted, they are then diverted from the regular bottle line and are fed to a 12-valve filler, close coupled with a canning machine which, in turn, is close coupled to a coding device which stamps an identifying serial number on the sealed cans. The discharge of the coding device consists of a stainless steel reversing and inverting twister which turns the cans upside down to insure proper sterilization of the top of the can by the hot juice. Inverted cans are then fed into the opposite side of the pasteurizer from which bottles are usually fed. In this case, the pasteurizer serves almost entirely as a cooling chamber since sterilizing is much more rapid in the cans. Cans are discharged from the pasteurizer in much the same way as the bottles but are diverted from the conveyor line feeding the bottle labelers and carried to a can labeler which handles up to 180 units per minute. The can labeler discharges onto a pack-off table from which the cans are replaced in their original cartons which have, in the meantime, been properly imprinted. The full cases then pass to the sealing department where they are handled in the same manner as the glass.

In line with the complete revamping of the packaging equipment, considerable attention was given to the redesign and streamlining of the container and the label. The entire family of five sizes of bottles, namely, the quart, pint, 12-oz., 8-oz. and 4-oz. containers were reproportioned in accordance with careful specifications. With the exception of the 4-oz. size, light weight glass is used throughout. An entirely new and striking label is used which has the added feature of having recipes for the use of the product imprinted on the wings where they can be read easily. In order to modernize the design, the brand name and other printed matter on the main panel of the label were considerably simplified and blocked in in bold lettering. The balanced use of a red and white, combined with the rich color of Concord grapes, produces an eye-arresting effect.

The operating results obtained for the first six months of production in the new plant are reported to be most gratifying. Production capacity has increased considerably at the same time that production costs have diminished. Figures on bottle breakage have been reduced to a minimum, the records showing an average of between one-tenth and two-tenths per cent container loss in the bottle shop. Most important is the fact that the entire program has made it possible for the National Grape Corp. to achieve its purpose of supplying to the public a grape juice of quality at lower prices and in more appealing and efficient packages.

Credit: Power case conveyors and pack-off tables, Walter McGuire Co. Air, bottle and can cleaners, Pneumatic Scale Corp., Ltd. Bottle filler, can filler and conveyors for cans and bottles, Horix Manufacturing Co. Eight-head crowner, Liquid Carbonic Corp. Pasteurizer, George J. Myer Manufacturing Co. Labelers, Economic Machinery Co. Case sealer and can labeler, Standard-Knapp Corp. Can closer and can coder, American Can Co. Carton printer, Ideal Stitcher & Manufacturing Co. Bottle, can and case counters, Durant Manufacturing Co. Roller conveyor, Rapids Standard Co. Juice preheater, Walker-Wallace, Inc. Temperature controls, Taylor Instrument Co. Glass containers, Brockway Glass Co., Inc. and Anchor Hocking Glass Corp. Labels, Muirson Label Co., Inc. Label and case gum, National Adhesives Division of National Starch Products, Inc. Caps, Armstrong Cork Co.

SIMPLIFIED GIFT LINE PAYS

(*Continued from page 76*)

potential. Other items include a wooden nut bowl, complete with mallet, finished in rustic natural bark.

The packages thus combine the basic essentials of gifts in that they have, first, attractive delivered appearance. Secondly, immediate utility in that the candies and other delicacies may be consumed by the recipient and third, re-use utility in that a portion of the package is so designed as to possess some permanent consumer value.

Credit: Cellophane, flat and shredded, by Sylvania Industrial Corp. and E. I. du Pont de Nemours & Co., Inc. Wire display containers by Manhattan Manufacturing Co. Glass basket by U. S. Glass Corp. Glass hat by Paden City Glass Co. Wicker baskets and nut bowl by Promotion Units, Inc. Ribbons by W. E. R. Ribbon Corp., Buser Co. and Stark Bros. Fancy decorations by Fibre Cord Co. Jars by Hazel-Atlas Glass Co. Labels by Ever Ready Label Corp.

PACKAGE LEGISLATION

(*Continued from page 64*)

A number of other products, in addition to tea bags, are today marketed in such jumbled dispensers and an adverse decision by the Administration would affect a very large number of manufacturers.

Dietary Food Labeling

A hearing will begin October 7, 1940, in Washington, D. C., on proposed regulations prescribing label statements concerning dietary properties of food purporting to be or represented for special dietary uses.

A food would be subject to the regulations, as proposed, by reason (among other reasons) of its purport-

ing to be or being represented for use: (1) by infants, children, aged persons or persons suffering or convalescing from disease, or (2) in the diagnosis, cure, mitigation, treatment or prevention of disease, or (3) in a diet for controlling body weight or otherwise affecting the structure or any function of the body, or (4) in preventing or correcting any dietary deficiency.

Label statements relating to vitamins, minerals, infant food, food used in control of body weight or in dietary management with respect to disease, non-nutritive constituents and hypo-allergenic foods are prescribed. A general statement of the dietary properties and directions for use are also required to appear on the label.

The proposed regulations are designed to give effect to the provisions of section 403 (j) of the Federal Food, Drug and Cosmetic Act. This section declares a food misbranded if it purports to be or is represented as a food for special dietary use and its label does not bear the information required by the regulations. The information which may be prescribed is such information concerning its vitamin, mineral and other dietary properties as may be necessary fully to inform purchasers as to its value for such uses.

The proposed regulations as published supersede the proposals previously published, but withdrawn as a result of the transfer of the Food and Drug Administration from the Department of Agriculture to the Federal Security Agency.

Agency spokesmen said the original proposals had resulted in considerable misunderstanding. Many food interests gained the impression that the proposed label statements were derogatory in character. It is the view of Agency officials that simple factual statements can be prescribed which will be of great value to the rapidly increasing numbers of consumers interested in dietary matters; that such statements will not hamper honest and fair sale of food products for special dietary use, but will promote confidence in dietary claims to the advantage of both producers and consumers.

The dairy industry in particular showed concern about the scope of the regulations, but administrative officials disclaim any intention to regard milk, cheese, butter and other dairy products as foods for special dietary use when they contain no added dietary factors and are sold for what they are, without representations of special dietary value. They point out that producers can therefore exercise their own choice as to whether or not they subject their products to the special labeling requirements.

These officials say that, while the question of whether a food is subject to the special labeling requirements must be determined on the facts in each individual case, it is their view that it may be helpful to the affected industries to announce in a general regulation the administrative concept of some of the various ways in which a food may be made subject to the proposed regulations. The notice therefore embodies a proposed general interpretative regulation on which comments are invited at the opening of the hearing. This general

Through days, months, years, Lusteroid rigid cellulose vials and tubes stand up and sell under the toughest merchandising conditions. They come through difficult sampling assignments with flying colors. And they survive all the rigors of modern transportation and shipping without breaking or spilling.

Their great strength allows Lusteroid packages to be shipped with a minimum of wadding and packing. Their extremely light weight means further savings on express and freight bills. They come in all the colors of the spectrum—and multicolor labels are processed integrally to the packages during their manufacture. You get the benefits of color packages, color labels that are *permanent for the life of the package* at no extra cost.

Write or phone for further information on the many advantages and economies of Lusteroid packages, without obligation.

LUSTEROID CONTAINER CO., INC.

Formerly Lusteroid Division of The Sillcocks-Miller Company

12 Parker Avenue, West

SOUTH ORANGE, NEW JERSEY

regulation is not subject to the formal hearing procedure that is required for the regulations prescribing special labeling requirements.

The notice provides that at least the entire first week of the hearing will be set aside for receipt of testimony of Government witnesses, among whom are a number of nationally known experts in nutrition. In order that interested industries may arrange appearances without undue loss of time, the Agency has directed the presiding officer, in the event Government testimony is completed before the end of the week, to adjourn the hearing until the following Monday for the testimony of industry witnesses.

Misbranding Via Can Illustrations

An interesting case, recently raised by the Food and Drug Administration, concerned misbranding of canned mixed vegetables. The product was a mixture of carrots, string beans, lima beans and peas. The labeling was misleading since the mixture contained no celery, beets (or pimentos) and potatoes, which were depicted on the vignette on the label, while it did contain carrots and lima beans which were not shown on the vignette.

Misbranding was alleged in that the vignette was false and misleading when applied to the product questioned, both in respect to items shown on the label but not contained within the can and in respect to items within the can omitted from the label vignette. Judgment has been entered in default, no claimant having appeared. The product was ordered delivered to a charitable institution, indicating that no question of lack of quality of the product was involved, but, rather, a simple question of misleading or misbranding.

This case, which is by no means a completely isolated instance, should emphasize for packagers the danger of using stock vignettes without ascertaining, in advance, that these fully correspond in every significant respect with the contents of the can. A very substantial volume of all canned fruit and vegetable products are packed under labels combining stock vignettes with original design elements. For most products, no difficulty is to be anticipated, but wherever mixed products are involved or products of a size, color or type somewhat out of the ordinary, a potential danger exists in the utilization of a stock vignette which does not conform, to the fullest degree, with the actual nature of the canned contents.

While, in the instance cited, a clear cut example of both omission of illustrated portions and inclusion of non-illustrated portions are to be found, it is to be presumed that the Administration would have a similarly strong case where substantial size differentials exist as between the illustration and the product. Such possible differentials would be found in the case of diced fruits or vegetables where it might be alleged that the consumer misled by a picturization of the product in size units substantially differing from those actually to be found within the can.

MAKING IT LOOK BIGGER

(*Continued from page 70*)

solved by Surlin and Co. in the creation of two groups of packages, both utilizing cast gypsum figurines. One series consists of four miniatures—little statuettes going under the names, "Swingsterette," "Skating Girl," "Colonial Girl" and "Ski Boy," with each figure holding a vial of perfume in its arms. Mounted on round paper boxes and enclosed within glass domes, the one-dram vials have been built into packages measuring almost 3 in. in diameter and $5^1/_2$ in. in height. Yet, no one could pretend that the containers are deceptive, for the vials are clearly visible to the consumer and the other portions of the containers are quite as logically a valuable part of the product as the perfume itself.

For lower-priced items, a group of gypsum castings, symbolic of Christmas themes, are utilized. A Christmas bell is topped by a ball-shaped vial of perfume. A wreath has a cup in its base section into which is set a vial capped by a closure in the shape of a candle flame. A molding of a candlestick design serves as a mounting for a similar vial with candle flame closure of molded plastics.

In the manufacturing of the figurines, a special gypsum material has been developed which is, in many respects, similar to plaster. It is, however, durable and washable and is available in white, ivory, blue and pink tints.

Credit: Gypsum by U. S. Gypsum Co. Vials by Kimble Glass Co. Closures by Owens-Illinois Glass Co. and Victor Metals Products Corp. Paper bases by F. N. Burt Co., Inc. Glass domes by Federal Glass Co.

HEAT TREATED GLASS DISPLAYS

(*Continued from page 82*)

taken and, in turn, rephotographed and mounted as a gelatin positive on either very fine mesh silk or copper screen. The necessary colors are worked onto the glass which is, at this time, in flat sheet form. After all the colors have been screened onto the glass, they are put through a firing lehr at a temperature of 1000 deg. F. It takes the glass approximately $3^1/_2$ hours to move from the beginning to the end of the lehr, by which time it has been properly fired and annealed.

Once these colors have been fired into the glass, they become virtually an integral part of the sheet and, it is claimed, will not fade, peel or deteriorate. The glass is then placed in a mold or pan and again fired, this time at a temperature of 1400 deg. F. The high

Packages... FROM PRE-FINISHED METALS

For new beauty and economy in packaging, use American Bonded Pre-finished Metals. Available in striking patterns, in bright or satin finishes of nickel, chromium, brass or copper. The metals are completely pre-finished, ready to be formed, stamped or drawn into your completed unit. Engineering counsel available without obligation. Write for full details.

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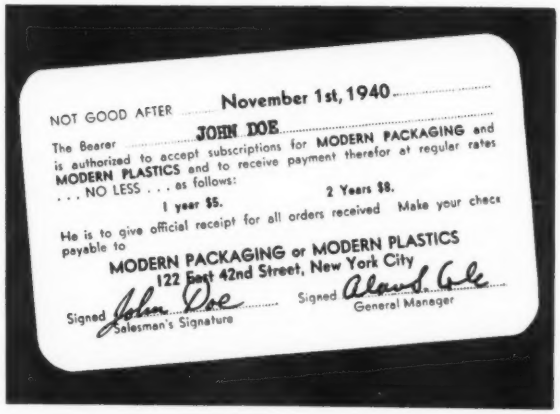
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Signed John Doe Salesman's Signature
Signed Alan S. Cole General Manager

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"I'LL TAKE THE ONE WITH THE TRIGGER-TOP"

SHE MEANS A FEDERAL SERVER

Multiply this picture by several millions annually and you'll begin to get a picture of the "why" of Federal Servers' proved popularity. Both women and men prefer them because they make attractive table packages, eliminating the pouring of syrups (for instance) from selling to dispensing containers. They cut mess and drip. And they cut waste, too, which is a real economy feature.

Put one of these "proved popular" Federal Servers to work for your product—either as a package or as a premium.

FEDERAL TOOL CORPORATION
"Closures With A Function"
400 North Leavitt Street, Chicago, Ill.

heat causes the sheet to take the shape of the mold which may be convex (the simplest shape) or a more complicated relief where the nature of the display so requires. The re-formed glass is then put through another annealing process at 1000 deg. F. and all the strains are removed from the formed sheet during this particular procedure.

The process under discussion differs from glass decorating processes formerly utilized in that ceramic colors, made permanent through heat firing, replace the cold colors or paints which have previously been used. The present form is not subject to the peeling reported to have been common under previously utilized methods of production.

The new process permits the utilization of a large number of colors and a consequent higher refinement of detail. Displays have been made, by this process, with as many as 16 and 18 colors, although a lesser number is usually found sufficient for most designs. The use of large lehrs and processing equipment permits the fabrication of displays of virtually any size, the maximum being approximately 4 ft. by 6 ft., although, of course, the average display is generally of far smaller dimensions.

Numerous methods have been devised for illumination of the convex forms. The most common method is the bulb illuminated platform which may be fabricated of wood, metal, plastic or any combination thereof. The base of the convex sheet is set into a slot in this platform, with the illuminated bulb immediately behind. Other forms vary from hanging wall lanterns and wall brackets to a straight sheet type of display utilizing a wood frame and mirrored glass. The latter type dispenses with illumination.

Dealer receptivity for displays of this type is reported to be heightened both by the permanent nature of the unit and its illuminating fixture. Frequently, such displays have been utilized as night lights, being left illuminated after store hours and thus affording additional display value in terms of added periods of display effectiveness.

Credit: Displays designed and manufactured by The Cincinnati Advertising Products Co.

TESTING OF PHYSICAL CHARACTERISTICS

(*Continued from page 41*)

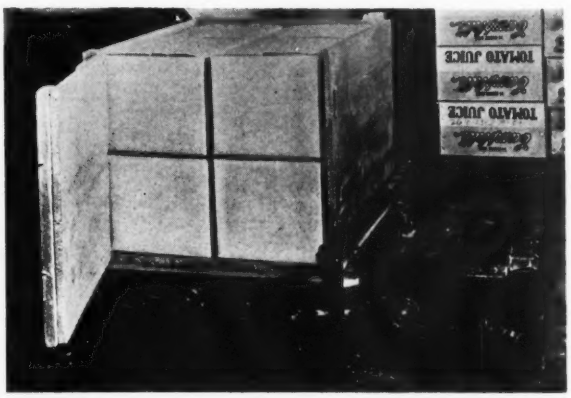
parts in succession as the drum revolves at a constant rate of two revolutions per minute.

The number of drops which a container can withstand in the revolving drum before failure is a measure of its serviceableness. The failures occur gradually so that weaknesses of design and construction can be detected readily. From the standpoint of durability and protection afforded the contents against rough handling, this test is particularly valuable in comparing different methods of packing. This applies to differences in interior packing as well as in the shipping containers themselves.

By using the drum, tape tests in addition to those described earlier can also be performed. A tape which is to be tested is affixed to the manufacturer's joint of a specially designed box measuring approximately 8 in. by 8 in. by 28 in. These unusual dimensions provide an exceptionally long joint without making the volume of the container too large. The box is then loaded with standard No. 2 cans filled with water. Around the cans is placed a special liner protecting all scores but open at the manufacturer's joint.

The box is then revolved in the drum and the number of drops required to rupture the tape—the manufacturer's joint being the only unprotected edge—is noted. This affords probably the most accurate index of the tape's quality.

Drum tests performed for General Motors Overseas Operations furnish an excellent illustration of their value. Three different types of container—plywood, wire-bound, and wooden—were under consideration for export shipment of Delco batteries. The results definitely eliminated the possibility of using one kind and indicated that, of the remaining two, one would be preferable to the other.



THE "JIGGLE" TEST is designed to simulate the vibration and jarring to which a container is subjected during transportation. The container to be tested is loaded and placed on a platform which is made to jounce and vibrate by a system of cams underneath. The container is subjected to this jolting motion for a number of hours, as would be the case during transportation, and is then examined to determine how much damage has been sustained.

Another application of the "Jiggle" tester is to seal the boxes empty, place them in the machine and pile the loaded containers on top, and then conduct the test in the usual manner. After being jiggled, the boxes are tested in compression to determine how their strength and rigidity have been affected by the treatment they have received.

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TRADE MARK
THE DUPONT CELLULOSE FILM

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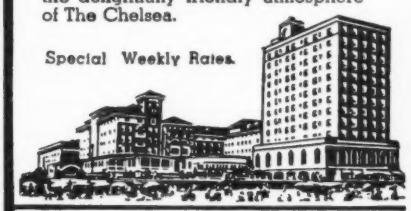

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JOEL HILLMAN • J. CHRISTIAN MYERS • JULIAN A. HILLMAN

READY FOR BIG "FALL" BUSINESS!

Looks good—in the studio . . .

But what a fall! . . .

Here goes, from a 32nd-story window . . .

IN FACT, users of *the strongest paper boxes* (what other would you back in such a test as this?) are supremely ready for whatever may come—this Fall and every other season.

For, by the Metal Edge packaging method, they assemble their own husky, good-looking boxes just as they need them—whether a few hundred or thousands. Metal Edge, too, gives them other distinct advantages in times like these.

Could you, like leading merchandisers in almost every industry you can name, profitably use Metal Edge packaging? Let us look into it and advise you candidly.

That corner must'a hit something! Merchandise, however, comes through unharmed.

NATIONAL METAL EDGE BOX CO.
334 North 12th Street, Philadelphia
Strongest Paper Box

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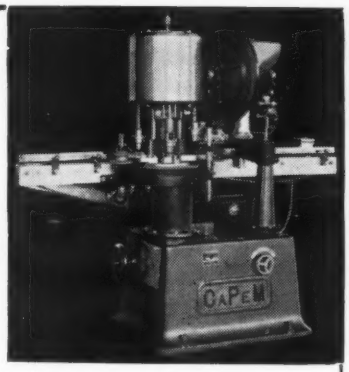

- Takes containers from conveyor belt, caps them perfectly and returns them to belt entirely automatically.
- Handles jars, cans and bottles of all sizes and shapes.
- Handles any type cap—deep caps, shallow caps, plastic or metal.
- Operates at speeds from 2,000 to 7,500 per hour.
- Trues up caps that are slightly bent.
- Eliminates inspection, yet guarantees a properly sealed package.
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HAS THE ANSWERS

The Unseen Factor . . . Adhesives . . . can make or break the sales appeal of your new Christmas Packages.

Especially is this true in these days of hundreds of varieties of coated and lacquered papers, and transparent cellulose . . . great for holiday and gift sales, but imposing special difficulties for adhesives.

These special stocks need no longer worry you. Take full advantage of their novelty, attractiveness and luster.

For UPACO has devised, tested and proved scores of formulae for almost every specific type and weight of unusual paper, board, or cellulose on the market. These assure not only never-failing adhesion, but also quicker drying and easier application.

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UNION PASTE CO.
1605 HYDE PARK AVE., HYDE PARK, MASS.

Dundee Towel container, fabricated of Vuepak by Old Dominion Box Company, Charlotte, N. C., for Georgia-Kincaid Mills, Griffin, Ga.

An eye STOPPER for the Christmas SHOPPER

Sell by showing—that's the modern trend in gift packaging. And Georgia-Kincaid Mills are following this trend by packaging their 1940 Christmas line of Dundee Towels in rigid, transparent Vuepak, *the fourth major towel manufacturer to utilize the sales advantages of this modern packaging material.*

Through the air-clear walls of this Vuepak container, shoppers can see the texture, quality, style and color of Dundee Towels. Thus, the product becomes its own best salesman, turning the casual *eyer* into the profitable *buyer*, while the product is permanently protected against handling and soilage inside its substantial container of rigid Vuepak.

In a few weeks now, you'll find this Vuepak container winning prize display spots for Dundee Towels on sales counters of retail stores across America. And in these same stores, chances are you'll also find Vuepak at work for scores of other products, ranging from shirts to candy, from cigars to perfumes, all gaining more buy-appeal through an increase in eye-appeal.

Tomorrow will see still more products selling more and selling easier in Vuepak. Will *your* product be among them? For complete information and names of capable Vuepak fabricators, inquire: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield, Massachusetts. District Offices: New York, Chicago, Detroit, Birmingham, St. Louis, San Francisco, Los Angeles, Montreal.

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YOUR salesmen are doing a swell job on wholesale and retail outlets, but who has the final word on the success of your product? You know the answer yourself. It's the customer. Every day in stores and at home she passes final judgment.

That's why it's important that your cartons are custom built for their job—that they have the quality-look clean boxboard and brilliant inks give—that they are sturdy enough to protect contents in transit and practical enough for hard usage in the home.

And this is why so many manufacturers are enthusiastic about Michigan Cartons. They're hard working salesmen constantly plugging for increased sales, wider distribution and greater product acceptance. They work overtime to please your particular friends, the customers.

Why not let us show you the new sales opportunities Michigan Cartons can offer you? Just phone or drop us a line. Your inquiry will receive prompt attention.

Michigan Carton Co.

BATTLE CREEK, MICHIGAN

Vitamins for Lazy Packages

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SHELLMAR PACKAGE VITAMIN B
SHELLMAR PACKAGE VITAMIN C
SHELLMAR PACKAGE VITAMIN D
SHELLMAR PACKAGE VITAMIN E
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THEY DON'T PAY THEIR WAY! THEIR INERTIA HANDICAPS GOOD PRODUCTS! THEY LOSE SALES!

TRANSFORM THEM INTO *LIVELY, DYNAMIC, SALES PRODUCERS*

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SHELLMAR PACKAGE VITAMIN D: Protection. Conferred by the use of only PROTECTIVE package materials.

SHELLMAR PACKAGE VITAMIN E: Visibility. Permits the product to sell itself, because it can be SEEN.

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